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STATE MEDICAL JOURNAL

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Official Publication of the Medical and Chirurgical Faculty of the State of Maryland

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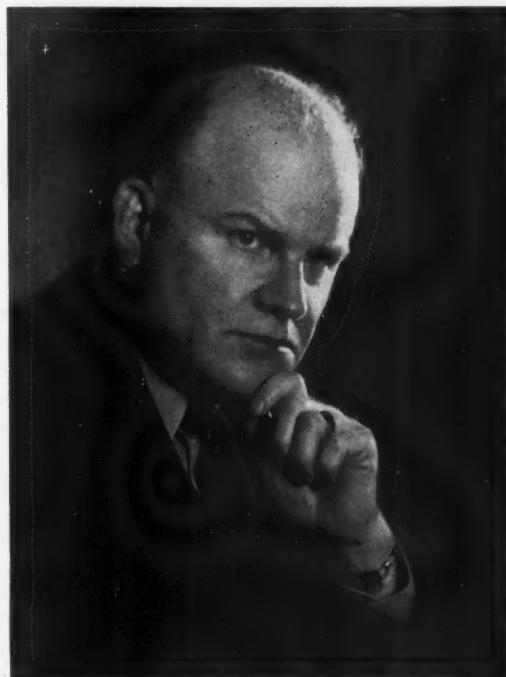
VOLUME 4

May, 1955

NUMBER 5

EDITORIAL

LESLIE E. DAUGHERTY, M.D.*



LESLIE E. DAUGHERTY, M.D.

To be present when great epochs of medicine have transpired; to feel the growing pains and see the mysteries enfold, is not the fortune of all who follow in the footsteps of *Æsculapius*.

But, to read that ninety per cent of all drugs used now were unknown twenty years ago, is a revelation. Then to hear the side effects namely; in a certain Hospital in a certain City of the South (it could have been the North, or even the East or West) a patient was ad-

*Member of the Editorial Board, MARYLAND STATE MEDICAL JOURNAL.

mitted and given penicillin three days and when the patient was no better the physician examined him. That is news indeed.

Now from afar off—Labor admonishes its workers (England) "If your physician does not take off your shirt, you haven't had a good examination." In another country, some would have you believe "he would take your shirt right off your back."

To be sure these are catch phrases, but sometimes pains in the heel may mean prostatic disease.

Æsculapius, the god of medicine, son of Apollo and Coronis, by a caesarean section, after the death of his mother, gives us some idea of the state of medical art in Greece, prior to the Hippocratic era. This is the thirteenth century before Christ.

The best of practice has its vogue and then sleeps only to be revived again at the turn of a century or new Renaissance.

Materia medica and pharmacy, owe much to Eastern medicine and the apothecary, the latter an Arabian invention.

The culture of Arabia invaded Europe when the Moors broke into Spain. Until the Italian Renaissance in the fifteenth century and Paracelsus; he the first scientific critic, marked the beginning of a new era of medicine. Then came the anatomists, Vesalius, Eustachi and Fallopio. The physiologists and clinicians followed. The circulation of the blood being discovered in 1628 A.D., a scant three hundred years ago.

As a consequence, surgery began to rise from the dust and the reform of therapeutics took place during the eighteenth century, when John Hunter set about laying the foundation of modern pathology.

What with the rise in antibiotics and bacitracins, surgery has taken on renewed strength and now the dreaded heart diseases are being conquered.

What next? With all this man soars on to greater and greater length of life, only to be posing new and greater problems both in the old and the young. The great Osler said, "It is not enough to know disease, one must distinguish between growing old, normal senility and disease." One ponders the term arteriosclerosis. At the other extreme, prematurity; where seventy per cent of neonatal deaths occur in premature infants. To reduce infant mortality, is to keep premature infants alive. To this a serious danger arose; the very thing the infant needed most, oxygen, was to cause a living death, blindness.

Medicine obeys the call and thus begins the trends. Lest we be swallowed up in the trends, more acute diagnostic acumen must take hold.

Prevention is our hope; cure a necessity. With the vastness of the project we must keep step.

Research is the answer. We must see that the competent get into medical schools. We cannot wait for the state to provide. It is a gigantic task. Medical men and women must provide not only the incentives, but the stimulus to spur wealth, industry and science; to insure the future by grants, endowments and gifts outright to individuals and institutions.

The American Medical Education Foundation is the immediate answer. To survive in this atomic age, brains will rank supreme over brawn. Give now your strength, your intellect, your substance that all may benefit. It is deductible from your income tax. You may designate it to your medical Alma Mater, or to any branch of medicine and for any specific purpose. And best of all, in any amount.

7 Washington Street
Cumberland, Maryland

THE FACULTY DIRECTORS—PRESENT AND FUTURE

On May 1, 1955, the resignation of Mr. Walter N. Kirkman, Director of the Medical and Chirurgical Faculty of the State of Maryland, became effective. Those of our members who have been associated with him in the many activities of the Society have learned to depend upon the experience, wisdom and guidance which Mr. Kirkman has always so ably provided. It is our good fortune that he will remain with us on a part-time basis to continue with some of the work he has organized so well. No one can speak with more authority than your Treasurer, Dr. J. Albert Chatard, who writes the following:

RETIREMENT OF MR. WALTER N. KIRKMAN

"Eight years is a long or short period; depending on how you look at it. About eight years ago, your Treasurer and author of this resume, was floundering around in the complex financial resources that belongs to the membership of the Medical and Chirurgical Faculty.



WALTER N. KIRKMAN

"Out of a clear sky, like 'manna from heaven,' Mr. Walter Kirkman, appeared in our midst, as our newly appointed director.

"Coming to us, after many years in the State Government as Comptroller, Budget Director, Advisor, and Purchaser, he at once set up our finances in a business like way, balancing our budget each year, and making the picture of our financial inheritance stand out as never before. I was most happy to have the 'mantle of Elijah' fall on his shoulders.

"I doubt if any of the officers, except possibly our secretaries, have been as close to Mr. Kirkman as myself; he freed me of many financial problems and made the Treasurer's job one of great pleasure and little work.

"I do hope my appreciation of Mr. Kirkman's work has spread to all the other members of the Faculty. He has been of inestimable value in guiding our Legislative Committee through the proper channels at our State Legislature meetings in Annapolis. He has been of inestim-

able value in a multiplicity of ways and every member of the Faculty owes him a great debt of gratitude. He has now sought relief from his many duties, but fortunately for us will remain as an advisor and consultant on a part-time basis. To me this is a wonderful climax to his work and will be of great value to our new Director, Mr. Jesse Marden, whom I wish to welcome at this time to our fold. I am certain that with his background we will continue to develop in our medical, social and financial relations to our City, County, State and National Societies.

"I retire this year, after about fifteen years as your Treasurer, with much pleasure in the knowledge that Dr. Wetherbee Fort will be your new Treasurer and that his duties will continue to be lightened by Mr. Kirkman.

"Again, I want to say to all of the members of the Medical and Chirurgical Faculty that the time and work that Mr. Kirkman has given to us can hardly be expressed by a few words. I hope we will be able to have his advice and counsel for many more years.

"Adios, Mr. Walter, from the bottom of my heart and with an expression of deep gratitude from the entire Faculty membership.

J. Albert Chatard, M.D."

APPOINTMENT OF MR. JESSE MARDEN IV

We welcome as our new Director, Mr. Jesse Marden IV, who has been appointed by Council on the recommendation of the Special Committee appointed to find a successor to Mr. Kirkman. Mr. Marden is a graduate of the Baltimore College of Commerce and the University of Baltimore Law School. Prior to his coming with the Medical and Chirurgical Faculty,



JESSE MARDEN IV

Mr. Marden held the position of Secretary and Assistant Treasurer of the Pennsylvania Water & Power Company, culminating a service of twenty-four years in varying capacities with that organization and affiliated companies.

Our new Director is confronted with a challenging task but also an opportunity to build and further extend the organization and facilities of this Faculty in increasing its effectiveness to the physicians who are its members, to the Component Societies, to the American Medical Association, as well as to the individuals whose health is our responsibility.

We wish him many years of happy and successful association with us as our Director.

*Everett S. Diggs, M.D.
Secretary*

SPRINGFIELD LECTURE RENAMED TO HONOR THE LATE DR. BEYER

The Department of Psychology, Springfield State Hospital, announces that the third Annual Springfield Lecture has been renamed the Virginia Beyer Lecture in honor of the late Virginia Beyer, M.D., former Clinical Director of Springfield State Hospital. Dr. Beyer came to Springfield in August, 1925 and died in September, 1954. When the Department of Psychology was conceived in 1950, Dr. Beyer readily opened her mind to a new discipline in her every day professional life. She gave of her time, collaboration, and influence to make the department what it is today, a total force of 14 people. It is to her memory and her contributions to clinical psychology that this lecture is now dedicated.

The first Virginia Beyer Lecturer is Stuart C. Miller, M.D., of the Austen Riggs Center, Stockbridge, Massachusetts. The dates are June 24 and 25, 1955. The topic is "Contemporary Psychoanalytic Ego Psychology." Registration fee: \$10. For further inquiries, write to Dr. Michael H. P. Finn, Chief Psychologist, Springfield State Hospital, Sykesville, Maryland.

\$125 MILLION ASKED FOR HILL-BURTON; INCREASES FOR RESEARCH

The AMA Washington Letter, No. 84-4

The President's budget requests, as interpreted program-by-program, show the following:

Hill-Burton. The maximum amount, \$60 million, asked for the new program of health facilities, and \$65 million for the older program of grants to "complete hospitals;" current spending is \$21 million and \$75 million respectively.

Research. Increased grants to all research programs, some as great as 50%.

Veterans Administration. Medical care costs set at almost \$889 million, compared with \$862 in current spending; hospital construction (mostly remodeling) \$60 million in contrast to current \$50 million.

In budget message the President expressed concern that the VA patient load would rise 4% next year, and that "... more than two-thirds of the expenditures will still be for patients hospitalized or treated for ailments not connected with military service." He also observed: "... we must bear in mind that government policies designed to assist in the maintenance of a prosperous economy and to support social security, health, and other humanitarian programs are all of value to veterans as well as to other people. Since more than two-fifths of all adult males are entitled to veterans' benefits, expenditures for veterans are a budgetary problem of major interest to the whole population."

Reports

COMMITTEE FOR THE STUDY OF PELVIC CANCER*

BEVERLEY C. COMPTON, M.D., *Secretary*

The Committee meets on the third Thursday of each month from 5-6 P.M., in the Small Hall of the Medical and Chirurgical Faculty Building. Selected cases are presented for discussion. All physicians are invited to attend the meetings.

Abstracts of Case Discussions:

CASE I. N. G. White. Age: 65 years. Widow. Gravida 6. Menopause, 1945. February, 1953, intermittent, moderate vaginal bleeding. The patient consulted doctor A and was hospitalized for a D. & C. and biopsy, March 12, 1953. The biopsy revealed carcinoma of the cervix, pathological grade III. On March 17th, the patient had a panhysterectomy and bilateral S. & O. In August 1954, intermittent vaginal spotting. The patient was found to have a recurrence in the vaginal vault and was referred to doctor B for treatment. She received radium and deep x-ray therapy.

Chairman: Is there anyone here who would care to say anything further about this case?

Most of you, I think, know that we classify cases according to delay in diagnosis or treatment and use the classifications: Patient Delay; Physician Delay; Institutional Delay. In this case there does not appear to have been any delay. We also list for discussion cases which are interesting from the standpoint of treatment. In this case listed today, we apparently do not know the stage, and I assume that the operation was a simple hysterectomy rather than a radical procedure. Even in a stage one, I would call this inadequate treatment. We have had several cases of this type and there has been some discussion as to whether we should have a new classification for such cases.

Visiting surgeon: If a woman is given douches, she is getting treatment, even though it is the wrong treatment. We all agree that is delay. I feel this is a similar situation.

Visiting surgeon: If we keep a patient from getting

* Under the auspices of the Medical and Chirurgical Faculty and the Maryland Division of the American Cancer Society.

proper treatment by giving her improper treatment, isn't that delay?

Visiting surgeon: I still think there should be a new classification for inadequate treatment. I feel that delay means that the diagnosis has not been made. In this case and in similar cases we have discussed, the diagnosis was made promptly.

Committee member: If we are going to adopt this new classification, I think we should have some agreement as to what is proper treatment.

There was considerable discussion of this. The consensus was that anything less than a radical Wertheim for a stage one was inadequate treatment. The preference was for radium and deep x-ray therapy in stage one as well as in the more advanced stages.

CASE II. N. P. Colored. Age: 43 years. Married. Gravida 2. Subtotal hysterectomy fifteen years ago because of tumors. Patient says she has had spotting or slight bleeding intermittently since operation. Considerable vaginal discharge. Post-coital spotting for two years—increased in past six months. Consulted doctor A in late February 1954, regarding pain in right side, irregular bleeding and various other complaints. Vaginal examination made and said to reveal a "smooth, uneroded cervix—extreme tenderness right fornix." Patient treated with antibiotic, with relief of pain. She returned to doctor A on September 3, 1954, with complaint of post-coital bleeding for several months. She was not examined at this time because of profuse bleeding. Examination one week later revealed an "eroded cervix, friable and bleeding easily." September 17th, the patient was referred for biopsy. Biopsy, done in early October, revealed carcinoma. Patient referred to hospital clinic for treatment.

Diagnosis: Carcinoma, cervical stump, I. C., stage I.

Treatment: Radium and deep x-ray therapy.

Chairman: There was obviously some patient delay in this case. Does anyone have further information concerning the patient?

Guest physician: I saw this lady in February of last year. She was complaining chiefly of pain in her right side. I did a speculum examination and the cervix was clear at that time. Her pain cleared up with the use of antibiotics. She returned in September with the complaint of post-coital bleeding. I

did not examine her at this time because of rather profuse bleeding. I seem to have learned back in medical school that you should not do this, but since I have been at this meeting today, I find that I have been wrong. However, I did examine her a week later and saw a granular lesion on the cervix which was extremely suspicious. On September 17th, I referred her for biopsy. There was some delay here because of illness in the patient's family. The biopsy was done on October the 11th and I read the slides as epidermoid carcinoma of the cervix. I referred the patient for treatment.

Visiting surgeon: It is interesting that when the patient was seen in February, the cervix appeared smooth. Apparently the patient did not report the irregular bleeding at that time. However, if a biopsy had been done, do you think it would have shown carcinoma?

Chairman: If you are asking me whether or not carcinoma was present at that time, I think it almost certainly was. Carcinoma-in-situ can lie dormant for a very long time. I do not mean that any carcinoma was present during all of the time the patient complained of intermittent bleeding following her hysterectomy. But in February of last year I think a smear or biopsy would have been positive. If the patient had reported the irregular bleeding I think a smear or biopsy was indicated even though the cervix appeared clean. Fortunately there was no delay following the examination in September and the case was still a stage I when the patient came to treatment.

CASE III. L. H. White. Age: 35. Married. Gravida 4. Patient had intermittent slight bleeding during pregnancy. Under care of doctor A during this time. Admitted to the hospital October 25th, 1954—in labor—moderately severe vaginal bleeding. Doctor B was called in consultation. A caesarian section was done and the cervix biopsied at this time.

Diagnosis: Squamous cell carcinoma, cervix, I. C., stage I.

Treatment: Radium 4500 mgm. hours, Oct. 31. Deep x-ray therapy.

Guest physician: This is my case. I first saw this patient in 1950 when she was pregnant. She was a gravida 2, para 1. She was delivered of a normal child and had no difficulty during pregnancy. Her postnatal examination was normal except for a slight cervical erosion. In 1951 she was again delivered of a normal child. Following this she did not come in for her six-week check. In 1954, I saw her

again in her fifth month of pregnancy. She was examined and nothing revealed on the cervix. When she was about twenty-eight weeks pregnant, I heard via the grapevine in the neighborhood that she was having some vaginal bleeding but this stopped and she did not come in to see me. When she did come in later I did not do a vaginal examination. She admitted she had had slight bleeding but this had stopped without any medication. The next time I saw her she was in labor and was admitted to the hospital. She was having considerable vaginal bleeding at this time. I thought she had a marginal placenta previa and a consultation was had.

Guest surgeon: I saw the patient after she was admitted to the hospital. I also felt that she had a marginal placenta previa. I felt a lesion on the cervix which I was pretty sure was malignant. As is often the case when you are in trouble, it was a Sunday afternoon and the laboratory was closed. We decided to go ahead with the caesarian section and at the same time arranged a double set up and the cervix was biopsied. But we could not go ahead and do a hysterectomy at the time of the section.

Chairman: The section was done then because of the bleeding not because of the carcinoma?

Guest surgeon: That is correct.

Chairman: I do not think anyone will argue with you about the indications for the caesarian section. Would you have considered doing a hysterectomy at the time of the caesarian if a frozen section had been available?

Guest surgeon: I would have been tempted but I did not do it

Chairman: How large was the lesion?

Guest surgeon: About the size of a twenty-five cent piece. It was entirely confined to the cervix, and was still a stage I.

Chairman: Certainly adequate surgery in the presence of pregnancy would have been a formidable procedure. I think you were right to treat the patient with irradiation.

Guest surgeon: I would like to ask one question. We discussed at the time whether it was advisable to use radium or x-ray first, considering the enlarged uterus. What is your opinion?

Committee member: I think you are better off to use radium first if the lesion is small enough and if technically possible, and unless there is infection and fever. I am inclined to think some cases get away

from us during a course of deep x-ray therapy. I think you can use radium about ten days after delivery and get a better result. In cases where the carcinoma is discovered during pregnancy, if the patient is not more than four months pregnant, we use radium. Then if the patient does not abort, do a hysterotomy, then follow in about ten days with deep x-ray therapy.

Chairman: We have discussed here several cases of bleeding during pregnancy where the patient was later found to have a carcinoma of the cervix. Apparently in this case, the bleeding was just a spotting but that is many times the case. The physician thinks first of obstetrical complications and does not do a speculum examination. In this case, there was no profuse bleeding until the patient was brought in to the hospital. Is that correct?

Guest physician: Yes, and when she was at term and in labor. I had my mind on a low placenta previa. I had known the patient for four years and there was nothing to make me suspect a lesion on the cervix.

There was discussion of the indications for speculum examination and biopsy in pregnancy. It was agreed that the thinking has changed completely in this regard—what was considered "heresy" not too long ago is now considered a safe procedure. Any irregular bleeding during pregnancy was considered indication for at least a speculum examination. Biopsy should be done when any suspicious lesion is present. Even with suspected marginal placenta previa, speculum examination was considered a safe procedure.

Guest surgeon: I would like to ask one more opinion about this case. This patient has now had radium and deep x-ray therapy and has not reacted at all. What next?

Committee member: That is our indication for a Wertheim. We do a Wertheim on stage I's and possibly some stage II's when the patient fails to respond to radiation therapy.

Chairman: Yes, I would agree that this patient should have a radical Wertheim and I should think this should be done before too long.

CASE IV. H. G. White. Age: 30 years. Married. Gravida 4-3-0-1-2. Since birth of last child in June 1954, patient had considerable vaginal discharge—menses somewhat irregular and flow more profuse than formerly. Patient under care of doctor

A during pregnancy and following delivery. Early November, developed pain in right side—referred to doctor B and hospitalization advised for repair of R.V.O. and removal of ovarian cyst. On November 30th, the patient had a right salpingo-oophorectomy and modified Coffy suspension. The pathology revealed papillary serous cystadenocarcinoma, right ovary. On December 8th, the patient had a total hysterectomy, and left salpingo-oophorectomy.

Guest surgeon: This is my case. I saw this patient first in February of 1954, when she was referred to me by her family physician with a history of missed periods. Her physician had thought she was pregnant. She had had some slight bleeding in January and was referred to me particularly because of this. My diagnosis was pregnancy plus an ovarian cyst in the cul de sac. Labor was induced one month early and she had her child on June 4th. She was referred back to me in November. She still had a mass in the cul de sac and she was admitted to the hospital on November 29th for removal of this cyst. At operation there was no suspicion of malignancy and we did not know until the pathologist's report was received that carcinoma was present.

Chairman: Was the cyst opened in the operating room?

Guest surgeon: No. I suppose this was a mistake but the ovary showed no papillomas. The cyst was grossly negative.

Chairman: Certainly there could be considerable discussion of the value of frozen sections. The same mistake might have been made had a frozen section been done but I do think they are of value in cases of this type.

Committee member: What was the pathology following removal of the second ovary?

Guest surgeon: Papillary cystadenoma. No carcinoma, but a cystadenoma.

Chairman: Of course, the tumor in the first ovary removed could have been a cystadenoma which became malignant. I am inclined to think this was the case.

Committee member: How large was the tumor when the patient was first seen?

Guest surgeon: My notes say "the size of a fist" which is not a very adequate description. At operation it measured 9 x 5 x 5½ cm.

Chairman: This case is particularly interesting because of the ovarian cyst encountered during

pregnancy. We have an obstetrician here today. What would you have done in this case?

Visiting obstetrician: With the pregnancy having four and one-half to five months to go, I probably would have gone after the cyst. I am a little disturbed by the histological diagnosis in this case. I do not go along that this type of cyst should be allowed to remain during pregnancy. Usually a mass in the cul de sac we think should be removed. It can lead to obvious difficulties. Also for some reason, not thoroughly understood, these cysts often twist,

or something, during the postpartum period and you get into difficulty.

Of course, under special considerations, this general rule is not always followed. I believe this patient had only about four months to go when the ovarian cyst was known. Also she had only one child. It was certainly a border-line case, and any decision difficult.

Chairman: Yes, it was a difficult case. Under the "rules of the game," I suppose it should be called "delay," but without criticism.

STATE HEALTH GROUP URGES FULL MILITARY STATUS FOR PHS

The AMA Washington Letter, No. 102

The Association of State and Territorial Health Officers wants the Public Health Service commissioned corps made a component part of the Armed Services. Delegates, winding up their annual meeting in Washington, passed a resolution "strongly" recommending that Congress pass a law giving PHS officers the same status and privileges now available to members of the Army, Navy and Air Force. The resolution also noted that while PHS service is credited toward fulfilling doctor draft obligations, this service does not confer veterans' rights. Dr. J. W. R. Norton, North Carolina state health officer, was elected president of the association, succeeding Dr. E. M. Erickson, Oregon health officer.

The following two resolutions dealing with international health were adopted: (1) that Congress appropriate enough funds to match the U. S. share of the WHO budget as set by WHO, and (2) that PHS draw up a list of competent, security-cleared public health personnel to be ready on short notice to join teams for overseas disaster relief.

The association, after declaring that some states appear to carry a very high proportion of their public health costs, while others seem to lean on federal funds too heavily, recommended the following: (1) federal representatives should meet with state budget heads or governors to find out why certain states fail to assume their fair load, (2) HEW should combine the four PHS health grants into a single consolidated grant to simplify administration, reduce bookkeeping and increase efficiency, and (3) federal funds should be distributed on a single allotment formula based on population, extent of problem and per capita income.

Other recommendations: (1) in the event the Salk poliomyelitis vaccine is licensed and released for prophylaxis, state and territorial health departments should administer it; (2) American Medical Association and constituent state and county societies should continue sponsorship of health fairs such as the one held recently at the clinical session in Miami as "an excellent means for carrying out effective health education," and (3) the AMA, PHS and health officers association should join in sponsorship of training sessions stressing non-casualty care aspects of civil defense.

Scientific Papers

RECENT TRENDS IN RADIOTHERAPY¹

ROBERT J. DICKSON, M.D. (Camb.) D.M.R.T.²

I would first like to express my gratitude to the officers of the society for inviting me to address you today and for the opportunity which this gives me of meeting some of the radiologists in whose midst I have come to work.

The title of this talk is purposely general and perhaps you will forgive me if I confine my remarks to those pointers to improvement in our methods of radiation therapy in which I am particularly interested. In their respective fields the Biologist, the Physicist, and the Engineer continue to cooperate in providing new evidence of the effects of radiation, of the physical effects of x and gamma rays, of alpha particles, electrons and neutrons and in producing more potent apparatus. It is largely to the representatives of these allied sciences, therefore, that we must turn for most of our advances in therapeutic technic, and the clinician's place is to try to assess the value of these new ideas in treatment of patients, and after a suitable time interval to report on the end results of such treatment.

Speaking as a clinician, therefore, I should like to draw your attention to some of the recent suggestions which have been applied in the clinical field as well as to those whose clinical applications we have yet to realize. First, for the subject is ever present in our minds these days, let us consider the beneficial effects which have come from the researches of the Physicist into nuclear fission, and there springs to mind the question of the radioactive isotopes. You are all familiar with the use of radioactive cobalt 60 as a substitute for radium for interstitial use and

in large teletherapy units (or, as unfortunately termed by the lay press, "bombs"), you also know of the uses of phosphorus in the treatment of polycythaemia vera and the leukemias, of iodine in thyroid malignancy, of gold as an agent in delaying the production of pleural and peritoneal fluid from metastatic malignant disease, but I might mention one or two more recent examples of the use of isotopes. In the urinary bladder for multiple superficial malignant papillomata, a bag containing radioactive sodium or bromine has been used at the Royal Cancer Hospital, London, and elsewhere with considerable success. A Foley catheter is inserted through a urethrotomy and the bag distended with the radioactive solution. The catheter is left in place until a dose of 2000 gamma roentgens is delivered to the bladder wall and this treatment is repeated at weekly intervals for three weeks. This treatment gives a high dosage to the bladder wall but there is a very rapid fall-off and when there is infiltration through the wall of the bladder this form of treatment should not be used. From the bi-products of atomic fission, radioactive caesium is produced and has been used in various centers in large units as an alternative to radium and cobalt. The radiation from this element, however, is only of the order of 650 kilovolts and it therefore has little advantage over conventional x-ray therapy. The radioactive isotope of the gas xenon is also produced in large quantities in the atomic pile and has a very high cross-section for neutron capture. Bags containing this gas have recently been described by Professor Mayneord as a diagnostic procedure for examination of the stomach. The suggestion has also been made that these bags might be used therapeutically in carcinoma of the stomach. In addition, the

¹ Presented at the Second Annual Meeting of the Maryland Radiological Society in Hagerstown, Maryland on Saturday, May 15, 1954.

² Chief of Radiation Therapy, Johns Hopkins Hospital. Formerly Radiotherapist, Hammersmith Hospital, London, England.

Radiation Therapist is interested in the localization of brain tumors by radioactive phosphorus and di-iodo-fluorescein. Finally, in the treatment of brain tumors, it has been found possible to infiltrate the lesion with boron and then bombard the area with a neutron beam. This produces an intense local radiation with alpha particles. It will be realized that, although to date the results of the use of radioactive isotopes in the therapy of cancer have been somewhat disappointing, many further researches are being made and some at least of these may become standard treatment in the future.

Also arising from researches in connection with nuclear fission we find the Radiobiologist becoming interested in protection against radiation. It has long been known that cystine when injected into the body will protect against radiation damage to a large extent. The amount necessary, however, is quite impracticable. But recently it has been found that some of the amines, particularly cysteamine, also have a protective effect in experimental animals. In at least one center in Europe, cysteamine is given routinely to all patients undergoing wide-field x-ray therapy and it appears that the incidence of radiation sickness is thereby reduced. It is hoped that this will be confirmed by experience of other centers in the near future. I realize that innumerable substances have been tried and become popular, for instance cerium, pyridoxine, and the antihistaminics and time alone will tell whether this is yet another of those substances which are widely used only to be found wanting.

The Biologist is also investigating methods of making malignant cells more sensitive to radiation than normal tissues and after colchicine and vitamin K, we have now the suggestion that an increase in oxygen tension in the tissues will give us a relative improvement in the sensitivity of the tumor cells. This obviously is of fundamental importance and it now remains for the clinician to confirm or refute the evidence obtained from plant and animal experiments.

To date we have no confirmatory clinical evidence of this effect, but I know that it is intended in one center in London to treat alternate patients suffering from carcinoma of the lung, one series breathing oxygen and the other treated in the normal fashion.

The Pathologist also is assisting us in our investigations into the mode of action of radiations on living cells. In England Dr. Glucksmann and in this country Dr. Ruth Graham with their different technics, are attempting to show by serial examinations during treatment of uterine cancer whether a particular case will prove radiosensitive or not. If their initial results are confirmed, we may look forward to the time when a tumor, after only a small dose of radiation, may be pronounced radio-resistant and surgery instituted immediately.

Finally, we come to the most impressive part of our discussion—although to my mind not the most important—that of the production by the Physicist and Engineer of larger apparatus of still higher voltages. Figure 1 shows a linear accelerator, the first to be produced commercially, which delivers x-rays of four million volts installed at the Christie Hospital, Man-



FIG. 1. 4 MeV linear accelerator installed at Christie Hospital, Manchester, England. Photograph by Metropolitan-Vickers Electrical Company, Ltd., Manchester, England.

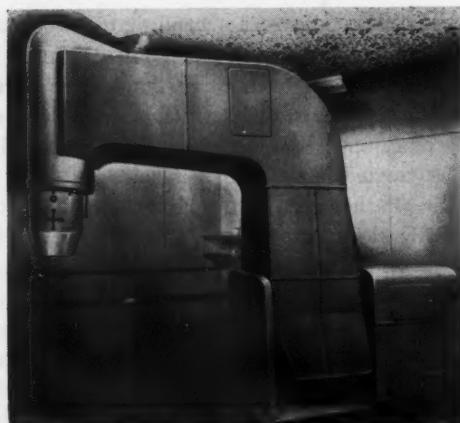


FIG. 2. Keleket-Barnes Cobalt 60 Rotational Therapy Unit. Printed by courtesy of the Keleket X-ray Corporation.

chester. Several of these machines are being built and the same firm has made one linear accelerator of eight million volts which has now been working for approximately a year at Hammersmith Hospital in London. Figure 2 is the latest model of cobalt therapy apparatus, capable of rotation in two axes. The patient is placed on this stretcher and the ring containing the cobalt rotates a full 360 degrees. The ring will also oscillate so that eccentric rotation of the head is possible. These are but two examples of the ingenuity of our colleagues in the allied sciences, but I would sound two notes of warning in regard to this apparatus. First, these machines are not going to produce a startling increase in the cure-rate of cancer. What they will do is to enable us to treat certain of the more deeply seated lesions which have hitherto been inaccessible. Secondly, and I hesitate to mention this obvious fact in this gathering, our conception of tissue tolerance will have to be radically altered. With conventional kilovoltage the limiting factor of the amount of treatment which can be given has usually been the skin, and we have become accustomed to judging the dosage by the severity of the skin reaction. With supervoltage, however, the maximum tissue dosage is at a point some centimeters below the skin surface and if we rely on skin

erythema to gauge our dosage, we shall be in danger of producing a necrosis of the deeper tissues. Similarly the depth dose is so increased with supervoltage therapy that the exit dose of radiation becomes very important if a crossfire technic is employed. With these reservations, however, we may see that one of the chief advantages of using these higher voltage machines is that the same or higher doses can be given to deeply seated tumors with less skin reaction and therefore with less discomfort to the patient. Now we cannot all own and operate this expensive apparatus and indeed without a trained staff of physicists and technicians, these machines are not practical, but I would commend to your attention the recent use of the grid or sieve in radiotherapy. Thanks to the enthusiasm of certain workers both in this country and in Great Britain this adjunct to therapy, the "poor man's supervoltage" as it has been termed, is becoming widely used. At Johns Hopkins the grid has been tried in the last 18 months in several cases of inoperable chest lesions with results which have impressed me considerably and I hope we shall be able to continue this series.

Finally, in this report on present day trends in radiotherapy I should like to mention the therapeutic applications of Dr. Russell Morgan's work on intensifying screens for fluoroscopy. We hope in the near future to be able to visualize patients undergoing rotation therapy on a screen distant from the treatment room, thus cutting down the exposure which is entailed by our present methods.

I have attempted in these few minutes briefly to review those aspects of recent experimental work which have interested me. I have omitted many things such as newer designs for apparatus for the application of radium in gynecology and Professor McWhirter's remarkable results in the treatment of carcinoma of the breast by simple mastectomy and postoperative radiotherapy which may lead to alterations in our approach to these problems, but there was not

time to discuss every recent idea. I would like to conclude by expressing my conviction that further advances in the treatment of malignant disease by radiation therapy will come more from a better understanding of the mode of action of radiations on living cells than by

building still larger machines of even higher kilovoltage.

*Department of Radiology
Johns Hopkins Hospital
601 North Broadway
Baltimore 5, Maryland*

DISCUSSION

HARRY A. MILLER, M.D.*

I appreciate this opportunity to discuss Dr. Dickson's paper and am sure that my remarks are superfluous. I do, however, want to emphasize the wide vistas that have opened for our specialty.

Mechanical and physical advances have made it easier for radiologists to accomplish the desired result of a differentially larger dose of irradiation into the tumor than its surroundings. It is doubtful, however, that any appreciably larger number of cases have been cured by the more facile equipment. The advances have, undoubtedly, increased efficiency.

One has only to recall the non-shock proof equipment of Coutard at the Curie Institute used to the very best advantage. Intracavitary irradiation might also have been done had there not been radium available.

It was at the Curie Institute that the respect for what Coutard called the "terrain of the tumor" was constantly emphasized. The fractionation technique was the outgrowth of this concern for the connective tissue environment.

Higher voltage, heavier filtration, greater distances, multiple fields have all contributed to widening the differential or what Paterson calls the therapeutic ratio. Grid therapy and motion therapy in all their aspects are further refinements of the original cross-firing technique multiplied toward infinity. These concepts have relatively recently been refined and improved in application. Apparatus for rotating the patient through various degrees of arc and a complete circle have been developed, while apparatus for moving the tube source has taken forms from pendulum motion to many turns of a spiral.

*Attending Radiologist, Sinai Hospital, Baltimore, Maryland.

More recently, a cobalt source has been mounted in rotating apparatus thereby combining an equivalent high voltage source with the multiple field technique.

Grid therapy, recently refined and re-studied, seems to offer the operators of equipment in the 200-250 K. V. range the means of delivering considerable doses to deep seated lesions with disproportionate damage to the surrounding tissue. Repair and recovery of the irradiated portion of the skin is extraordinary. It is, however, a very lengthy and tedious discipline for both the patient and the doctor.

It is perhaps in normal tissues that the effects of irradiation have been investigated the most avidly since the advent of atomic irradiation. This will, undoubtedly, advance our knowledge of irradiation viz a viz the limits to which one can go in treating a tumor and still get recovery of the tissue surrounding it. The great impetus to physiological and biochemical research with respect to ion exchange, autolysis and the like will undoubtedly advance the purely therapeutic possibilities.

Accumulating knowledge of the effects of the endocrines, particularly of cortone and ACTH upon the connective tissues is giving us valuable aids in irradiation.

My own impression is that, when Hodgkin's disease masses have become radio-resistant, the administration of cortone will renew the radio-sensitivity. I also get the clinical impression that one can give larger doses of irradiation without damage to the skin or at least, the response of the skin is less marked. The use of ACTH in the treatment of severe reactions might receive more attention.

*2452 Eutaw Place
Baltimore 17, Maryland*

RECENT TRENDS IN DIAGNOSTIC RADIOLOGY¹

THEODORE F. HILBISH, M.D.²

Ours is a specialty young in the science of medicine but growing with vigor unsurpassed by other branches of our chosen profession. Ever since the discovery of the "X-ray" by Roentgen in 1895, the utilization of this invisible ray for diagnostic purposes has increased by leaps and bounds. Unfortunately, as is often true with many useful scientific discoveries, this new diagnostic method carried hidden dangers to the user which were at first unknown. It remained for men such as Walter Cannon and others to not only develop the use of this ray but also to learn by bitter experience the potential harmful effects.

The purpose of my discussion, however, is not to review the history of radiology but rather to direct a few remarks toward some of the recent developments in the field. I shall start out by mentioning a few of our own experiences in the Diagnostic X-ray Department of the Clinical Center.

Like many radiologists, I have been frequently harassed by inability to substantiate the statements of our medical colleagues, the gynecologists, that certain female patients have ureteral strictures. These patients almost invariably have symptoms of costovertebral pain or some other manifestations suggestive of partial obstruction of the urinary tract. Yet our routine I.V. Pyelograms fail to demonstrate evidence of pathology. We have discussed this problem on numerous occasions with associates in the field of radiology, urologists and gynecologists, but our conversations invariably have failed to offer a solution. Due largely to the interest of the urologist at the Clinical Center, we determined to attempt a solution to this problem utilizing some of the recent diagnostic

equipment which we had procured. It was our feeling that the best approach would involve a physiological study of the urinary system. An overdistention of the urinary tract by retrograde pyelography or the introduction of a foreign body such as a ureteral catheter was sure to disturb the physiology of the urinary tract. After some consideration we finally adopted the following procedure.

The patient to be examined is moderately dehydrated, following which she reports to the X-ray Department where 50 cc's of 70% Urokon is injected intravenously rather slowly. We use an 18-gauge needle for this injection following which approximately 300 cc to 400 cc of 5% glucose in water is administered as rapidly as possible through the same needle from an intravenous flask. This usually takes about 8 to 10 minutes. Following administration of this solution, serialographic films are taken at the

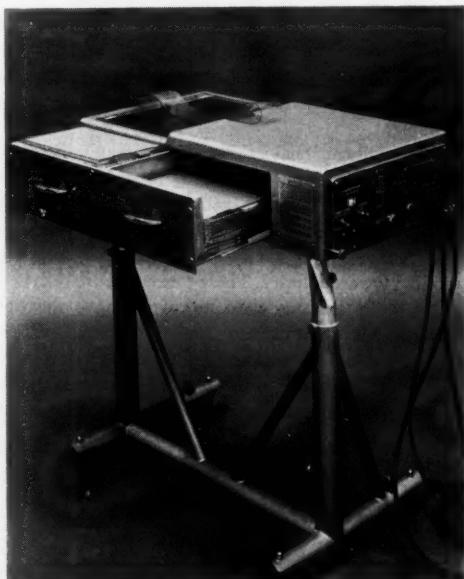


FIG. 1. Sanchez Perez serialographic X-ray unit used for serialography.

¹ Presented at the Second Annual Meeting of the Maryland Radiological Society in Hagerstown, Maryland on Saturday, May 15, 1954.

² Chief, Diagnostic Roentgenology, National Institutes of Health, Bethesda, Maryland.



FIG. 2. Filling of urinary collecting system on a routine serialgraphic film. Note contraction proximal end left ureter.

rate of one film every two seconds for a total of 12 films. These films are obtained utilizing the Sanchez-Perez serialgraphic X-ray Unit. Fig. 1 illustrates the current model of this particular diagnostic apparatus.

The films obtained in this manner are first studied radiographically to evaluate the areas of narrowing and to determine if they are persistent as well as to thoroughly study the entire urinary

tract. The X-ray films are then placed in register and photographed with a motion picture camera. These films may then be projected by a motion picture apparatus and the physiological action of the urinary tract evaluated. Fig. 2 shows a routine serialgraphic film. Fig. 3 is a composite of the left ureter demonstrating ureteral peristalsis.

We are still in the stage of evaluating this

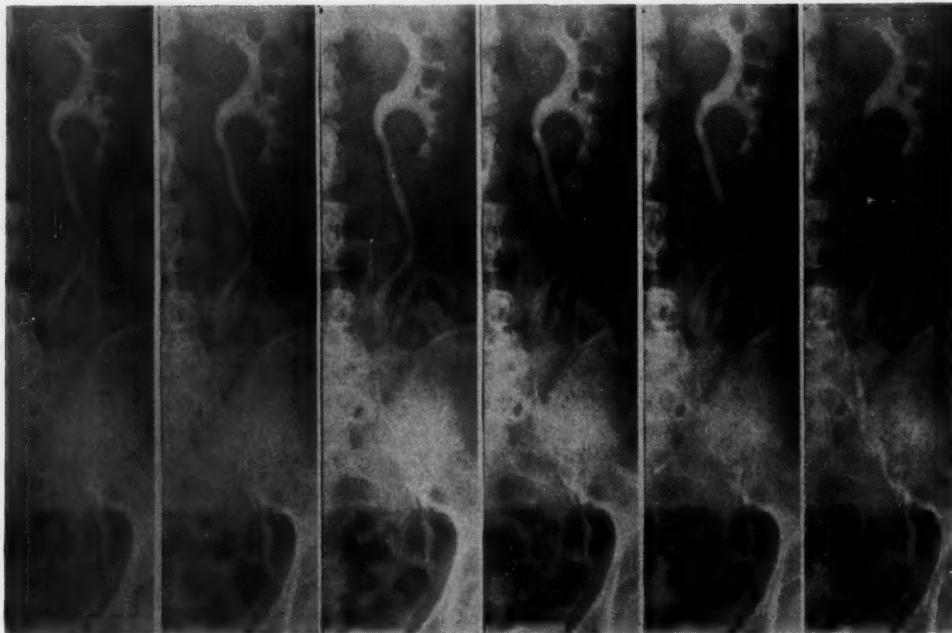


FIG. 3. Composite illustration showing peristaltic action left ureter. Note contraction proximal end of ureter.

procedure, but as of this date have two cases which we believe represent minimal ureteral strictures which were not demonstrated by regular intravenous pyelographic studies. Likewise we have recently been able to rule out a small lesion of the right kidney pelvis of a physician utilizing this diagnostic method. In this instance, the I.V. Pyelogram demonstrated what appeared to be a constant filling defect of the right kidney pelvis. The serialographic films subsequently showed good filling of the area in question as well as good contraction of this segment of the renal pelvis.

As we all know, one of the recent trends in diagnostic radiology has been the utilization of contrast media and of serialographic examinations. We are most fortunate in our Department in having recently acquired a Schonander biplane angiographic unit. Since this represents the only unit of its kind in operation in this country at the present time, I felt it would be of sufficient interest to this group to present a picture of the unit and to show some

of the results which we have obtained from its early use.

Fig. 4 is a pictorial presentation of the Schonander biplane angiographic unit. Fig. 5 shows the two film changing mechanisms—one in the horizontal and the other in the vertical position. The film changing mechanism is used in conjunction with a table which is placed over the horizontal filming area for support of the patient during the angiographic or other filming process. The table is entirely portable and is moved out of the way when not in use. This Schonander unit provides many combinations of filming which we have found to be most useful. It is possible to use either of the filming areas independently or they may, of course, be used simultaneously. The unit permits the taking of individual films up to the rate of six films per second in both planes. Likewise, this mechanism may be used as a storage house for films and the unit may be used for other diagnostic procedures taking one or more films at any interval desired. Each film changing mechanism

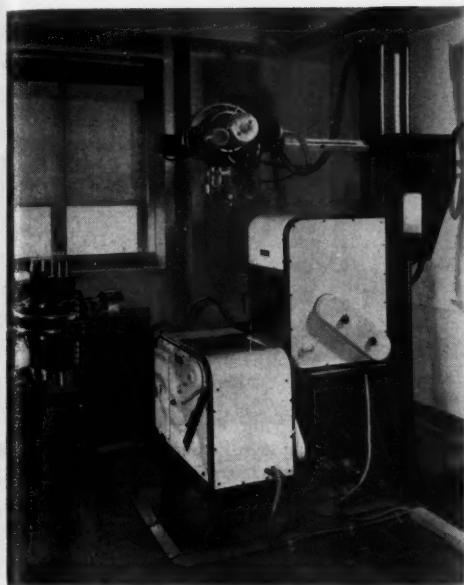


FIG. 4. Schonander biplane angiographic unit

has a film holder consisting of individual slots and holding up to 30 films each. The films are loaded in the slots and may be spaced according to any pre-planned program of filming. The films are 14 x 14" cut films. They are transported independent of a cassette holder or film frame.

Fig. 6 is an A.P. view of a retrograde aortogram performed on a white female showing a



FIG. 5. Schonander unit during performance of angiographic study with patient on table and X-ray tubes directed for A.P. and lateral films.



FIG. 6. Retrograde aortogram demonstrating large aneurysm arising from ascending aorta. Note thick wall of aneurysm due to clot and thrombus formation.

large aneurysm of the ascending aorta which is partially filled with contrast substance. You will note that this aneurysm had a tremendous wall which was not opacified and this wall at operation was found to be due to thrombus formation. Fig. 7 is an A.P. view of a splenogram which shows excellent filling of the splenic and portal veins with some of their branches. This patient was a white female, age 50, with marked hepatic enlargement and a history of several episodes of hematemesis. Fig. 8 is a film of a cerebroarteriogram taken on the Schonander unit. This unit is



FIG. 7. Splenogram demonstrating good filling of portal vessels.

very useful in cerebroarteriography since films may be obtained in both planes simultaneously thus reducing the number of injections by 50%. Likewise, the unit provides filming of cerebroarteriograms at any desired rate of speed.

As might be expected in a research institution such as ours, we are frequently presented with new diagnostic problems by the various research investigators. For example, we recently conducted preliminary studies directed toward the cineoradiography of contrast substances within the aorta in an effort to study the flow pattern within this vessel. In order to accomplish a study of this type, it is obvious that some special instrument must be provided which will intensify the fluorescent image in order that it may be photographed on moving picture film. This we attempted by utilization of the Phillips fluorescent image intensifying tube. Fig. 9 illustrates this apparatus in our first attempt at consummating the procedure. This particular image intensifying tube provided an intensification factor of 1100 times. The preliminary study was accomplished by instilling drops of Iodochloral into the aortic arch by means of a retrograde catheter inserted into the femoral artery. We found the oil droplets could be readily seen with this apparatus but could not be followed by the human eye due to their ex-



FIG. 8. Combination cerebral arteriogram and pneumoencephalogram demonstrating air in ventricular system and contrast media in cerebral vessels.



FIG. 9. Phillip's tube during utilization of apparatus for retrograde oil droplet study in aorta.

tremely rapid course down the aorta. We plan next to determine if the course of the oil droplets can be followed by cineoradiography utilizing slow motion techniques. It is the desire of our colleagues in the National Heart Institute to determine the convection currents of the aorta in an effort to study the etiological factors responsible for arteriosclerosis and other changes occurring in the aorta. This work is in its infancy and has not advanced to a degree that provides useful information at this time.

This same fluorescent image intensifying tube has been studied in our Diagnostic Department in relation to its use in general fluoroscopic

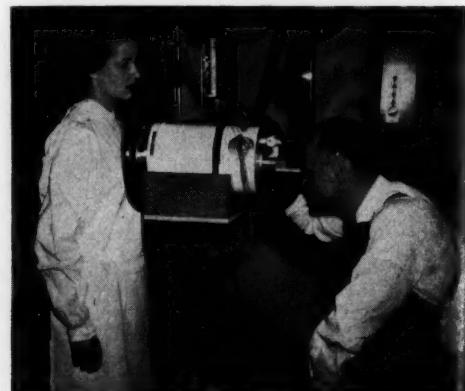


FIG. 10. Phillip's tube as used in conjunction with chest fluoroscopy.

examinations. We found we could fluoroscope without dark room adaptation and in brightly lighted rooms at 1/4 to 1/2 m.a. The apparatus at present is not practical, however, as it requires binocular vision as shown by Fig. 10. The Phillips people tell us they soon will have on the market a lens system which will provide a viewing surface of five inches in diameter. The viewing surface will thus be comparable to the unit which is now commercially available from the Westinghouse X-ray Corporation. We are extremely interested in the field of fluorescent image intensification and envision many uses for this type of equipment in the not too distant future. I hesitate to speak at any length on this subject, however, as my knowledge in this field is limited and in no way compares with that of Dr. Morgan for example. However, I believe this apparatus will be utilized not only as a diagnostic

tool but as a teaching method in many of the medical centers in the future.

While speaking of the activities in our own Diagnostic X-ray Department, I should like to mention one other type of diagnostic X-ray procedure which may be of some interest to this group. I am referring to the utilization of a bronchoscope and the passage of a needle under direct vision through the bronchoscope and through the carina into the left auricle. This needle is utilized to determine the left auricular pressure. Following pressure studies, a contrast substance (70% Urokon) is injected directly into the left auricle and films are obtained to determine the size of this cardiac chamber and an attempt is also made to differentiate between mitral stenosis and insufficiency. This procedure in our limited experience has not been associated with any serious complications. The work is performed by one of the staff members of the National Heart Institute aided by fluoroscopic and radiographic control in our Department. The bronchoscopic procedure is accomplished on the X-ray table and films are taken at the time of

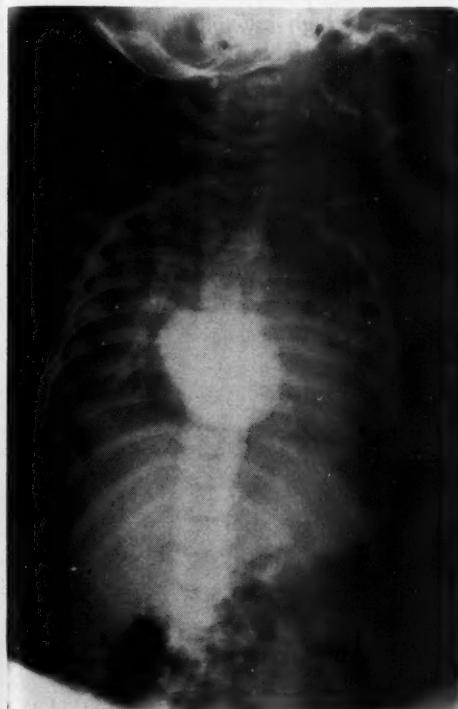


FIG. 11. Congenital mitral stenosis demonstrating pooling of contrast media in left atrium.



FIG. 12. Congenital mitral insufficiency demonstrating large left atrium.

injection of the contrast substance. The only complication we have encountered so far has been the accidental injection of Urokon outside the left auricle into the pericardial sac. These patients experience immediate precordial pain which is transitory in nature and they have suffered no after effects. One of these patients was operated upon a few days after this accidental injection and at surgery there was a small amount of sanguinous fluid in the pericardial sac but there was no evidence of adhesions or other sequelae following the injection.

I mentioned the utilization of the bronchoscope and the intraauricular injection of contrast substance as a means of differentiating mitral stenosis from mitral insufficiency. There has been a great deal of interest in this field, as you know, due to recent advances in cardiac surgery. It is of extreme importance to the surgeon to know whether he is dealing predominantly with a mitral insufficiency or a mitral stenosis when planning his surgical approach to the mitral valve. Angiocardiography has recently been emphasized as a method of differentiating mitral

insufficiency and stenosis especially by the Philadelphia group. We have had some experience in this field but I am not convinced the method is reliable.

Fig. 11 demonstrates a case of congenital mitral stenosis with the contrast substance pooling in the left auricle. In this case the opaque media remained in this chamber throughout the study which lasted from 12 to 15 seconds. Fig. 12 is from a case thought to be predominantly that of a mitral insufficiency. In this case the left auricle was larger, the contrast substance was diluted more rapidly, and remained in the left auricle a shorter period of time. As indicated, however, in our experience this method of differentiation is not always reliable. This patient, based on the clinical findings, cardiac catheterization, as well as angiocardiographic findings, was thought to have predominantly a mitral insufficiency.

There has been a recent increase in interest in utilization of high kilovoltage as a diagnostic method of determining the presence of tumors in the mediastinum. I am referring to the use of

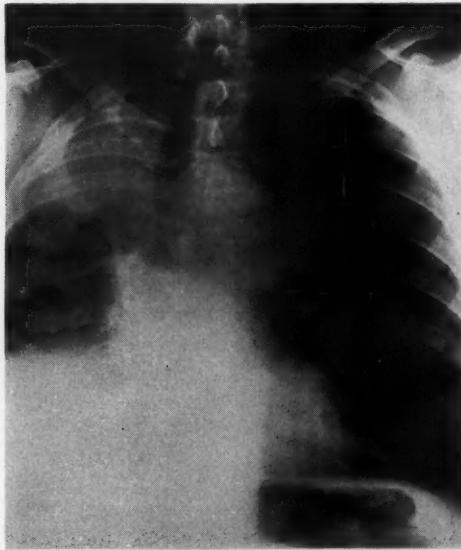


FIG. 13

FIG. 13. P.A. film of chest utilizing conventional radiographic techniques.

FIG. 14. Chest film same patient with one million volt equipment demonstrating carcinoma encroaching upon left side of trachea. Figure reprinted by courtesy of Dr. Eugene Pendergrass, 3400 Spruce Street, Philadelphia 4, Pennsylvania.



FIG. 14

one million volt radiographs. X-rays produced at levels of one million volts will penetrate the dense structures almost as readily as the soft tissues. In this manner a tumor located in the mediastinum will no longer be obscured by mediastinal densities and hence will be more readily portrayed in a manner not possible with conventional diagnostic kilovoltages. Fig. 13 portrays a conventional film with normal kilovoltages, while Fig. 14 represents results obtained with one million volt equipment. It is my feeling that equal if not superior results can be obtained by laminagraphy and angiocardio-graphic studies. However, my experience in this field is quite limited and I am in no position to offer an authoritative opinion on this procedure.

Another recent trend in diagnostic radiology is the utilization of contrast substances in bronchog-raphy which are readily eliminated from the lung fields. The interest in this procedure is rather recent in the United States; however, bronchography utilizing water soluble media has been practiced in Europe for several years

particularly in England and Sweden. My first contact with this diagnostic approach occurred several years ago when I was at Johns Hopkins Hospital. At that time, Dr. Proctor of the E.N.T. service at Hopkins and I had a water soluble preparation consisting of diodrast and methyl cellulose compounded for us by the Pharmacy at the Johns Hopkins Hospital. We first tried the preparation on dogs and later on humans. We soon found that preparations of this type varied considerably in their viscosity depending upon slight variations in the percentage of methylcellulose in the product. We next acquired some umbradil from the Astra Pharmaceutical Co. This product actually consisted of essentially the same ingredients just mentioned plus the presence of one-half per cent xylocaine. We used this preparation on several patients and found it to be quite irritating; hence, our results were not too satisfactory due to coughing of patients in spite of good anesthesia. Our studies were terminated due to



FIG. 15

FIG. 15. Bronchogram performed using Dionsil.



FIG. 16

FIG. 16. Subsequent film same patient 24 hours later demonstrating almost complete elimination of contrast media from bronchi.

Dr. Proctor's assignment in Philadelphia and my transfer to Bethesda.

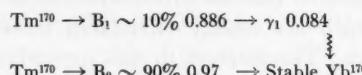
I have recently again become interested in this subject and made some preliminary investigations. I learned that Dr. Wilson of Johns Hopkins Hospital has been working on this same project and will soon publish a paper on his results. He has been using a product called Dionosil which consists of 30% iodine. This product is an insoluble powder which may be used in suspension (50%) with peanut oil or in water with methyl cellulose (about 3/4%) as the suspending agent. Fig. 15 was obtained from one of Dr. Wilson's cases, and Fig. 16 taken 24 hours later shows that the material has been almost completely eliminated from the lungs.

The next step, of course, is to develop a method of micronizing the powder to such an extent that it may be dispersed along the bronchial tree by nebulization, thus eliminating the time-consuming and, at times, difficult problem of introducing the material by intratracheal catheter. A low surface tension agent such as "tween 80" would be necessary to aid in dispersion of the material into the terminal bronchi. We hope to investigate these possibilities at the Clinical Center.

In keeping with the subject matter of this discussion, I should like to very briefly mention the development of Xeroradiography by Dr. John Roach and Dr. Herman Hilleboe. I am sure the majority of you have seen the exhibits of this interesting radiographic procedure at recent radiological meetings. Xeroradiography involves the use of a chemically coated aluminum plate which is charged electrostatically and then exposed to radiation. The charge is dispersed by the radiation in direct proportion to its intensity which in turn is governed by the density of intervening tissues. A fine powder is next dusted on the charged plate and adheres in greatest quantity in those areas carrying the greatest charge; hence the formation of the X-ray

image. I am sure the advantages and disadvantages of this procedure are obvious to you.

Finally I should like to mention two isotopes which have recently stimulated interest as sources of energy for diagnostic radiography. I am referring to Xenon 131 and Thulium 170. It is thulium which seems to offer the most promise in the field of diagnostic radiology. Portable X-ray units containing thulium and weighing less than 7 pounds have been constructed at the Argonne National Laboratory. These units have an output of 75 r per hour at one inch. The thulium source is self contained in a lead shield; the shutter being controlled remotely. Thulium has a half life of 129 days and an energy level of approximately 84 KV. Thulium decays as follows:



As far as I have been able to determine the AEC Isotope Branch has not quoted a price, as yet, on radioactive thulium. If the price were essentially the same as radiocobalt, the thulium source used in the X-ray units would cost about \$170. The Argonne Laboratories are preparing a thulium source estimated to be four times as strong as the present isotope. Using this new source plus high speed screens exposures of diagnostic quality of extremities should be possible at exposure times of 1 to 3 seconds.

It is evident that thulium will never replace diagnostic X-ray equipment but may be used in localities where X-ray equipment is not available. Likewise, thulium may serve as an excellent source of constant radiant energy in diagnostic and research investigations such as electrokymography.

*Diagnostic X-ray Department
National Institutes of Health
Bethesda 14, Maryland*

DISCUSSION

JOHN DECARLO, M.D.*

Dr. Hilbush has ably shown how improved x-ray technique and equipment have enabled us to demonstrate more normal and pathologic anatomy than ever before. Contrast media have made it possible to visualize practically every hollow and tubular structure in the human body.

Progress with regard to equipment continues to advance at a pace that astounds the imagination. Not too many years ago, radiologists timed x-ray exposures by the cadence of number counting and the rhyme of verse. We now obtain fraction-of-a-second exposures in rapid fire stereoscopic sagittal and lateral pairs. If so desired, the phase of the electrocardiographic cycle can be registered on each exposure of a series of angiograms.

Two phases of this evolution concern me. The first is the increased patient radiation hazard. All the newer techniques seem to increase the number of x-ray examinations and the number of exposures per examination. Patients are now receiving doses of radiation from other sources. They are being studied by radioactive isotope techniques. There are an increasing number of patients working with radiation and in atomic research. Soon atomic energy may be used in industry.

The radiologist must anticipate the future and may

* Chief Radiologist, Baltimore City Hospitals.

have to be more concerned about the x-ray exposure per examination. We should review our filter situation. Dale Trout points out that 2 mm. of aluminum make no significant difference in the quality of radiograms taken in the 70 kilovolt range; 3 mm. of aluminum make no difference in the 100 kilovolt range. The addition of this filtration, however, cuts the skin dose considerably (2 mm. of aluminum at 100 kilovolts reduces the skin dose by 70%).

The second phase of the progress of radiology that concerns me is the modern radiologist. The dignity of our specialty must be preserved and increased. We must strive to keep up with medical advancement. We must listen and welcome the remarks and conversation of our non-radiologic colleagues. Not only do our medical friends enjoy being listened to, but as pointed out by R. R. Newell, they read the literature for us. We could not hope to have sufficient time to read all the information that these good specialists carry right into our office.

We should be able to perform the minor surgery in connection with special x-ray techniques. The performance of special techniques will result in the higher regard of the radiologist by both the patients and medical profession.

1211 Cockran Avenue
Baltimore 12, Maryland

AIR EMBOLISM FOLLOWING POST-PARTUM SURGICAL STERILIZATION

Report of a Case

KENDRICK McCULLOUGH, M.D.* AND EDWARD MORALES, M.D.*

The pregnant and post-partum uterus provides easy access of air through the wide venous sinuses in the endometrium and cases of fatal air embolism are occasionally reported. The present case illustrates a mechanism by which this may happen and may serve to alert phy-

sicians who deal with post-partum cases to this particular danger.

Case Report: 34 year old, obese, negro woman in her eighth pregnancy, on the service of Drs. I. Rivers Hanson and Robert L. Baker. She delivered a full term, living female child weighing 2,760 grams, spontaneously, over an intact perineum on April 12, 1954. She had seven previous pregnancies, normal, without compli-

* From the Departments of Pathology and Obstetrics and Gynecology, Peninsula General Hospital, Salisbury, Maryland. Submitted October 4, 1954 for publication in the MARYLAND STATE MEDICAL JOURNAL.

cations. She ran a normal course this time. Labor lasted 9½ hours.

A voluntary sterilization was done because of multiparity, on the second day after delivery. She received pre-operatively, Nembutal gr. 1½, Demerol 100 mg., and Scopolamine gr. 1/150. The anesthetic was intravenous Pentothal, followed by Nitrous Oxide and Oxygen. The operation lasted 50 minutes. She was placed in the Trendelenburg position. The left Fallopian Tube was removed because it was enlarged (hydrosalpinx). A 1.5 cm. segment of the right tube was removed and the cut ends tied and closed in the mesosalpinx. The appendix was removed. The operation was completed without incident. She was then placed in a supine position and removed to her room. At that time her color was good; respirations regular; pulse strong, regular, in the rate of 60 per minute.

Upon return to her room it was found that her pulse and respiration were absent. Intra-cardiac adrenalin and oxygen by anesthesia apparatus failed to revive her.

*Pathologic Findings at Autopsy**: The body had the appearance of an obese Negro woman of the stated age, with signs of recent delivery and with a median, longitudinal, abdominal incision, 20 cm. long closed with skin-clips. The body cavities had the usual post-partum appearance. The pericardial fluid showed slight blood-staining probably resulting from the intra-cardiac puncture. The abdomen contained about 50 ml. of blood-tinged fluid. The uterus was uniformly enlarged. The fundus lay below the level of the lower end of the surgical incision. The appendix and left tube were absent, the right tube showed removal of a segment. The level of the tubes was about 15 cm. below the lower end of the incision.

The uterus was 19 cm. in total length, with 4 cm. accounted for by the cervix. The fundus was 12 cm. wide and 9 cm. thick. The wall was firm, pale gray and 4 cm. thick. The mucosa was rough and red, with about 50 ml. of adherent red

* Autopsy was ordered by Dr. L. A. Rademaker, Deputy Medical Examiner for Wicomico County, as an immediate post-operative death under general anesthesia.

clot. Estimated capacity was over 100 ml. Corpus luteum in the right ovary was 1½ cm. in diameter.

Blood removed from the heart for chemical examination was foamy. It showed no barbiturate. Examination of the cranial cavity showed many small gas-bubbles in the cerebral vessels. They were conspicuous on the surface of the hemispheres but disappeared after cutting the arteries at the base on removal of the brain. No other abnormalities were found and histologic examination added nothing.

The probable sequence of events was that air was trapped in the uterine cavity and was forced into the uterine sinuses on change of position from Trendelenburg to flat after operation. This change apparently caused a drop in the position of the uterus by 15 cm., as seen from the distance between the lower end of the incision and the post-mortem level of the tubal sites. With the vagina closed by apposition of the fat thighs, this would trap air under pressure in the cavity and force it into the circulatory system.

A similar case has been noted by the Office of the Chief Medical Examiner of Maryland (1). That patient was also obese and had had a Caesarian section. The thighs were approximated during lowering from Trendelenburg position and air embolism followed. Larson (2) in a report of four cases of air embolism mentions the Trendelenburg position as an etiological factor in two cases, though these were not post-partum.

SUMMARY

A case of air embolism following a sterilizing operation post-partum is reported. Air was apparently forced from the uterine cavity into the circulation during change of position.

*Peninsula General Hospital
Salisbury, Maryland
(Dr. McCullough and
Dr. Morales)*

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DISEASES OF THE PANCREAS¹

SAMUEL MORRISON, M.D.²

It is indeed a pleasure to come to Cumberland to talk to you on the subject of diseases of the pancreas and I appreciate your cordial invitation. This is, as you know, a difficult subject and as I have been reviewing it over the years, I find that it continues to be rather puzzling. I believe, however, that very important, though not dramatic advances are being made. When I talk of diseases of the pancreas, it is not my intention to take up your time discussing the anatomy of the pancreas which, as you know, consists of structures which have to do with its internal secretion and structures which have to do with its external secretions. Nor do I intend to spend too much time on the physiology of the pancreas, important as it is in the particular conditions which we are about to discuss. It is rather my intention to devote most of our time to three diseases: acute pancreatitis, chronic relapsing pancreatitis, and carcinoma of the pancreas. I would like, if time permits, to say a few words about aberrant and annular pancreas and islet cell tumors. Perhaps if there is occasion, your questions may direct me to other conditions of the pancreas.

PART I—ACUTE PANCREATITIS

Acute pancreatitis is a remarkable disease and has often been qualified by such a term as catastrophic, a word which makes clear the seriousness of the condition. Before Reginald Fitz's description in 1889, there was no clear-cut understanding of the condition. Opie's contribution in 1901 of the "common channel" theory for the production of acute pancreatitis was a very important step forward. Later in 1936 Rich and Duff described the vascular

changes which take place in acute pancreatitis as a result of the escape of pancreatic ferments and how, as direct consequences, hemorrhage, digestion and necrosis follow.

Historically four periods can be delineated in the development of our knowledge of acute pancreatitis. First there was the era when most of our knowledge came from the pathologist; this often indicated that the patient had not survived. Then later, there was the period of surgical interference with its high mortality rates. There followed the period of medical conservative therapy which is now developing into its logical follow-up; that is, that surgery follows medical treatment at a selected time and for certain specific reasons or complications.

Although Reginald Fitz gave his clear-cut description of the gross pathology and symptomatology of acute pancreatitis he did not present, (nor up to that time had there been), a clear distinction into the 3 or 4 pathogenetic types of acute pancreatitis. For example, we know now that approximately 75% of patients with pancreatitis have so called interstitial pancreatitis associated with edema of the organ and we know that the majority of these patients, if treated properly and conservatively will do well. Then about 12½% of patients have a real catastrophic pancreatitis which is characterized by a more severe clinical picture and represents a necrosis or hemorrhagic state of the organ and finally, there is the suppurative stage of pancreatitis which accounts for the remaining 12½%. The latter is often associated with abscess and pseudocyst formation.

In the early development of the clinical picture of pancreatitis, the clinician is not sure whether he is dealing with one type or another. He only knows that he is presented with a patient who has very severe abdominal pain perhaps with fever and who seems to be in

¹ Abstract of Address delivered before the Allegany-Garrett County Medical Society, June 25, 1954.

² Associate Professor of Medicine and Gastroenterology, University of Maryland School of Medicine.

more or less shock. The pain may be atypical or may be located in the epigastrium or in the left upper quadrant or may be of a boring type penetrating through the epigastrium to the back. On physical examination the findings are often not consistent with the severity of the patient's illness. In other words, the abdomen is usually not rigid as in perforated ulcer or acute gall bladder or peritonitis. There is not the typical pain of intestinal obstruction or coronary occlusion with which it may be confused; nor is it the pain of diaphragmatic pleurisy or pneumonia but all these conditions must be differentiated from acute pancreatitis. It has been said that one cannot make a diagnosis of acute pancreatitis on the basis of clinical examination alone; that is, by history and physical examination but each of these will contribute to the proper diagnosis if pancreatitis is kept in mind. In order to make a definitive diagnosis certain additional procedures are indicated and among them the serum amylase stands foremost.

Increasing awareness of the serum amylase test has developed in recent years thanks to the persistence of Elman and others. If this test is done in the presence of all types of abdominal pain it will prove of great value in arriving at a diagnosis of acute pancreatitis. One report indicates a 16 fold increase in diagnosis since the adoption of its routine use but to this day, Elman tells us that the importance of this test has not been generally appreciated. He and others have also made it clear that since they have been using the test, pancreatitis diagnoses have increased showing how much more common is this condition than heretofore supposed. The serum amylase test can be done promptly and within an hour the result can be known. If the value is above 500 there is usually no question that pancreatitis exists. The normal for the Somogyi serum amylase is from 40 to 140 units. In certain diseases of the salivary glands and sometimes in perforation of an ulcer into the pancreas (which often amounts to a pancreatitis) high values appear. I have one patient in my

own group, (a lady who was supposed to have had a stroke but in whom cholecystitis and cholangitis existed) on whom we did a serum amylase which was above 2000. When she was autopsied, there was nothing wrong with her pancreas so far as we could see. There are therefore occasional though rare exceptions to the infallibility of the test.

The test is only positive during the period of pain which means that when the pain has subsided, the serum amylase drops to normal. There are clinics in which the serum lipase is used as a diagnostic procedure since its positivity does not depend upon the immediacy of pain. Also a calcium determination is important because if the calcium is as low as 7 this would indicate a serious pancreatitis. The calcium falls, incidentally, because the lipase ferments and calcium react to form calcium soaps and in this process use a great deal of calcium, accounting too for the calculi which appear later. X-ray studies can be helpful if localized dilated loops of bowel are seen or if calcifications are visualized. These patients are not usually well enough to undergo barium studies but when these are done extrinsic pressure defects and other deformities brought about by the proximity of the affected pancreas to the neighboring stomach and duodenum may be very helpful to the trained observer in making a diagnosis. Finally, electrocardiographic evaluation is essential in the differential diagnosis as well as in the diagnosis itself.

I would like to take a moment to discuss the etiology of pancreatitis. If one reviews the literature (and many conflicting statements are presented), one finds that the disease is more common in men than in women. There are some exceptions in certain reports. It is the belief of Bockus and others that alcohol is one of the primary etiological factors and yet there are many large groups of alcoholics in whom pancreatitis is not found but it is true that the likelihood of finding pancreatitis is greater in alcoholics than in non-alcoholics. It has also been

thought for a long time that gall bladder disease precedes pancreatitis and yet we know that gall bladder disease is more common in women than in men. Moreover, gall bladder disease often follows the development of pancreatitis.

We come now to the treatment of acute pancreatitis, a treatment which has evolved over a period of years on good sound physiological principles. In pancreatitis, every effort must be made to put the pancreas at rest. First, however, the patient's pain must be relieved by Demerol and not morphine, since the former is primarily spasmolytic whereas the latter is spasmogenic and may occasionally aggravate the pain rather than relieve it; also an increase in serum amylase is often found after the use of morphine indicating spasm of the sphincter of Oddi. One should give sufficient Demerol to relieve the patient of pain. One should restore fluid and electrolyte balance. Since a great deal of fluid is lost, one should not hesitate to give blood and normal salt solution as well as 2.5% to 5% glucose solution. Since it has been found that a high percentage of plasma is lost in the retroperitoneal tissues as a result of inflammatory edema it should be replaced. Plasma is perhaps the best fluid to give. Whole blood may be required.

We then proceed to a plan of pancreatic rest. This means that the stomach would be kept empty by Wangansteen or other drainage. One must make sure that the tip of the tube does not extend beyond the pylorus since it is important to drain hydrochloric acid which stimulates pancreatic secretions. With drainage, alkalies should be given to doubly assure counteraction of hormonal stimuli. Also vaginal stimulation to the pancreas should be interrupted by giving atropine or one of the anticholinergic drugs. Having accomplished pancreatic rest, calcium should be supplied, if needed, and infection taken care of by the use of antibiotics. Other supportive and symptomatic measures would, of course, be taken as for example, the use of a low fat diet and pan-

creatin once the acute phase had subsided. On such a plan for a few days the patient would pass from the acute phase to the post acute phase which when it is stabilized would naturally lead to the treatment of the complications of acute pancreatitis. I must confess that though surgery is dangerous and usually not indicated during the acute episode, we have occasionally resorted to it in some of our patients either because there was persistence of pain or because we feared that some condition other than pancreatitis existed.

PART II—CHRONIC RELAPSING PANCREATITIS

There is quite a story connected with the development of the picture of chronic relapsing pancreatitis but I would like to give credit to Comfort, Gambill and Baggott, who in 1946 actually introduced the term "chronic relapsing pancreatitis" which is, as the name implies, a chronic pancreatitis in which relapses occur. Until this time there was some reason to believe that acute pancreatitis, pancreatic stones and calcifications, abscesses of the pancreas, pseudocyst formations, atrophy of the pancreas and nodular pancreatitis were in someway associated. However, I think Comfort's group, for the first time, really indicated very clearly that this was the evolution of one disease process. Later in 1947 and 1948, they studied a series of 29 patients with chronic pancreatitis without gall bladder disease and then another series of 27 patients with gall bladder disease. Careful detailed observations indicated to them that there were hardly any significant differences in these two groups except that when gall bladder disease was present it had to be eradicated and it was their judgment, since borne out, that gall bladder disease can just as well follow pancreatic disease as vice versa.

There are two clinical pictures to look for in chronic relapsing pancreatitis. One may be described as an awareness that a patient has been having recurring attacks of abdominal pain (acute pancreatitis). However, the clinical

picture has not developed to the point at which there is such interference with islet cell function as to bring about a picture of some degree of diabetes nor have the external secretions become so impaired as to produce interference with fat, carbohydrate, and protein metabolism in the form of creatorrhea, steatorrhea or the effect of deficient amylase. This would show itself by the presence of bulky fatty stools with undigested protein fibers and evidence of inadequate carbohydrate break-down. In the textbooks, one looks for this latter clinical picture but I daresay that it will be the former picture indicating early diagnosis rather than the latter picture indicating the situation when the pancreas had become more or less atrophied which will become more common as our diagnostic acumen develops.

In addition to these two clinical pictures, one would look for some of the associated changes such as the presence of a mass in the epigastrum; this is usually the result of pseudocyst formation. One would also look for evidence of calculi. In helping to make a diagnosis, those methods of investigation used in acute pancreatitis would be utilized. In addition, X-ray studies might show the presence of stones in the pancreas, biliary tract disease, or indirect pressure changes on the gastrointestinal tract.

I recall a patient who, some years ago, had excruciating jack-knife pains which did not respond to treatment so that operation became imperative. At the operation, he was found to have chronic pancreatitis and a cholecystostomy was done. He was allowed to drain for a reasonable period of time and then was discharged from the hospital. He got along fairly well but his pain returned and again it was difficult to relieve him and he was again hospitalized and cholecystogastrostomy was done. At this time the surgeon examined the pancreas, described it as nodular and malignant and so told the wife. The patient recovered from his operation and after a short time began to have pain again.

Meanwhile, he was collecting full disability from the insurance company on the basis of carcinoma of the pancreas. One day on examination, his heart was discovered to have shifted to the opposite side and he was found to have fluid in his right chest. This fluid, when removed was observed to be bloody and we continued to remove bloody fluid from his chest for quite some time. Since his pain was severe, it was decided to do a right splanchnicectomy. He developed a fistula and began to spit blood but in time, all this cleared. The patient now looks robust but continues to have periodic pain of mild degree. I regret to say he once had become a narcotic addict but has since overcome this habit. This complicated situation has left only the insurance company dissatisfied since they are continuing to pay full disability; however I think he is entitled to it since he has a disabling disease.

The next patient was collecting about 80% disability from the Veterans' Administration for neurosis and as you know, when the V. A. pays this much disability, they really believe the patient is neurotic. One night about 11:00 p.m., the family called to say that if there ever was an emergency, this was one and they wanted the patient seen. He had not been under my care except for a couple of office visits but when I saw him, I knew at once that this was not neurotic behavior. It was clear that he was having an acute exacerbation of chronic pancreatitis. He was not relieved by strong hypodermics and had to be hospitalized. While in the hospital a mass appeared in his mid-epigastrum. The surgeon told us it was malignant and urged him to be operated upon but he refused. He went home but after a week, called me to say that his pain was so severe that something would have to be done; he was hospitalized for operation. At operation he had extensive pancreatic necrosis so that the material had to be scooped out. Interestingly enough, he was closed and did not drain and made an uneventful recovery. Some weeks later however,

he called to say that another lump had appeared above his navel. When examined, there was no question that he had another pseudocyst and we decided to watch it. After a few days and again late at night, he called to say that the thing had burst and he was drenched. In other words, he had fistulated not only to form a pseudocyst but through his abdominal wall. It has now healed and he has been moderately well since.

The third patient was a lady who was having typical attacks of gall bladder colic. She developed diabetes with large quantities of sugar in the urine and blood. She did not respond to large doses of insulin and became worse until she succumbed to her condition. I mention this patient because it is often stated in the literature that diabetes associated with chronic pancreatitis is mild but I can tell you from personal experience that it can be very severe.

Having described chronic relapsing pancreatitis in this way and assuming that the diagnosis is made, what can we do for these patients? There are three types of treatment. One is conservative medical, the other, palliative surgery and the other, radical surgery. Perhaps it is helpful to realize that it takes about $\frac{2}{3}$ of the pancreas to carry on its fat function, at least $\frac{1}{2}$ of the pancreas to carry on its protein function and about 10% to carry on carbohydrate function.

Conservative medical treatment consists of a low fat diet. In addition to the low fat diet, we can give pancreatin in doses of from 5 to 25 gms. a day. Alkalies and antispasmodics are a part of conservative medical therapy and a pain relieving medication such as Demerol should be on hand.

Under palliative surgery, we would do a cholecystostomy, cholecystogastrostomy or cholecystoduodenostomy or sphincterotomy. In the hands of Doubilet and his group in New York, the latter operation has been remarkably effective. Some have been opposed to it because they feel it promotes ascending infection. How-

ever, the operation and its rationale is based on the belief that spasm of the sphincter of Oddi is responsible for the regurgitation of material into the pancreatic tissues.

Under both palliative and radical surgery, one would list gastroenterostomy where duodenal obstruction is present or subtotal gastrectomy to remove the acid bearing part of the stomach thus abolishing this hormonal stimulus to pancreatic secretion. Under nerve operation, one would list blocking or severance of the sympathetic nerves to reduce spasm and pain and to bring about better circulation. Under definitive surgery, some of them radical, one would list the removal of pancreatic stones or calcifications, the removal of, or the internal or external drainage of pancreatic cysts or the partial or total removal of the pancreas. A few words of comment may be in order on the drainage of pancreatic cysts. Sometimes these cysts are drained to the exterior and continue to drain for an indefinite period of time. Large amounts of pancreatic secretions are lost but rarely lead to electrolyte imbalance, dehydration, perhaps weight loss and interference with normal digestion. If external drainage persists too long, the fistula can be implanted into the stomach or jejunum and this is considered to be a very satisfactory operation. Marsupialization of the cyst holds promise.

If a large part of the pancreas is removed one is confronted with the problem of adequate digestion and the provision of sufficient secretions. The loss of pancreatic external secretions can be made up, in part, vicariously or by replacement in medicinals or by a small nubbin of pancreas left proximate to the duct. Finally it should be noted that the type of diabetes associated with a total pancreatectomy is not as severe as some of the ordinary diabetic states.

PART III—CARCINOMA OF THE PANCREAS

On the whole, people with carcinoma of the pancreas are often called neurotic for an average of 7 months before it occurs to the physician

that the patient may be suffering from a serious disease. In fact, I have on record a patient who consulted me in November, 1950 for nausea at the age of 72. She responded well to symptomatic therapy but at the time of her very thorough examination, the X-ray showed a non-filling gall bladder. However, our interest was directed to a displacement of the duodenal loop to which, at the time, and after considerable discussion we attached little significance. Throughout the years of 1951 and 1952, this elderly patient felt fine. However, in October of 1953, she developed a mild degree of jaundice which quickly became more severe, led to her hospitalization and exploration by surgery. She was found to have an inoperable carcinoma of the head of the pancreas which progressed rapidly and led to her death. However, she had been made comfortable of her pruritus from jaundice by a cholecystojejunostomy—Roux Y procedure. In retrospect, we are certain that this patient had already had carcinoma of the pancreas in November 1950. Perhaps some of you will question this long latency but I think it is safe to say that many patients will harbor a carcinoma of the pancreas for one to two years before serious symptoms develop and that during this time, many of them may be thought to have a functional disturbance.

The point I am trying to make is that if one considers the question of early diagnosis in carcinoma of the pancreas he must keep constantly in mind the possibility of its existence because most of the clinical pictures upon which we base the diagnosis are already indicative of advanced disease.

I am one of those who think it is important to differentiate between carcinoma of the head of the pancreas as distinguished from carcinoma of the body and tail of the pancreas. There is reason to believe that carcinoma of the body and tail of the pancreas metastasizes early whereas carcinoma of the head of the pancreas does not. Also carcinoma of the tail of the pancreas will not make itself apparent until regional extension

and perhaps liver metastases have appeared. In carcinoma of the body of the pancreas, pain may be present early, especially if the celiac plexus is involved. In carcinoma of the head of the pancreas, jaundice is a distinguishing factor. In summation, one would say that jaundice, pain and loss of weight are a trio of symptoms and signs which should make one think of pancreatic growths.

Whereas years ago it was the opinion of most of us that carcinoma of the head of the pancreas was characterized by a painless progressive jaundice, we now know that in only about 20% of the cases is this really the situation and that in about 80% of the cases, pain is present. If one looks for blood in the stool and anemia, one will not make an early diagnosis of carcinoma of the pancreas for especially in carcinoma of the body and tail, anemia is absent as is also occult blood in the stool. Only when, and if there is invasion of the duodenum or the stomach do these appear or when carcinoma of the head of the pancreas is actually carcinoma of the ampulla or biliary ductal system. Another differentiating finding of carcinoma of the body and tail is the appearance of thromboembolic phenomena. The exact mechanism of these vascular thromboses is not well understood except that it is believed that some clot-promoting substance may appear as a by-product of the carcinomatous condition which, with other factors, results in intravascular platelet coagulation. In contra-distinction to this, carcinoma of the head of the pancreas is associated with hypoprothrombinemia and thrombocytopenia. In fact, these patients need vitamin K.

You will find long statements which relate to a differential diagnosis between carcinoma of the head of the pancreas and chronic relapsing pancreatitis. These statements include many laboratory studies. I think it would be much more helpful to all of us if we could use our clinical acumen to make such a differential diagnosis and I think sometimes that patients

are too ill to be troubled with elaborate tests. For example, if a patient has persistent jaundice and an enlarged gall bladder and persistent pain, he probably has carcinoma of the pancreas whereas if he has intermittent attacks of pain without an enlarged gall bladder and with intermittent or no jaundice, he more likely has chronic relapsing pancreatitis. However, it would be desirable to evaluate the status of the pancreas.

In reviewing the literature, one finds that by using the serum amylase, serum lipase and alkaline phosphatase tests, he can often obtain a good evaluation of the extent of the carcinoma. For example, if the serum amylase and serum lipase are elevated and alkaline phosphatase is normal, one may conclude that the pancreas alone is involved whereas, if all three are elevated, one would conclude that liver metastases are present. If, on the other hand, only the alkaline phosphatase is elevated the probability that the pancreas is involved is unlikely. An elevated serum amylase is more important in inflammatory lesions whereas intermittent elevation of serum lipase may be more important in obstructive lesions. I do not wish to say that the diagnosis can be made so simply but the tests if properly coordinated with the clinical findings

will be of great help in arriving at, not only the diagnosis but the extent of involvement.

The challenge to the medical profession is obvious. We must make earlier diagnoses. One could more readily justify an early exploration on the suspicion of pancreatic carcinoma than he could justify its omission. Especially in carcinoma of the tail and body would early diagnosis allow for the possibility of curative surgery. When the patient is explored I think it is important to do a pancreatic biopsy. Many surgeons prefer not to do such biopsies for fear of producing pancreatic fistulae or other undesirable complications such as hemorrhage but at laparotomy the Vim-Silverman needle can be used not only to obtain sufficient material for biopsy but it can make it possible to examine tissues deep in the gland.

It is not my purpose in this abstract article to discuss the various operations which one can and should do in carcinoma of the pancreas. Although the mortality is high the inevitable results of non-operative procedures are so serious and relentless that only by operation can we make these patients more comfortable or can we develop improved operative techniques and thereby hope to arrive at cures.

11 East Chase Street
Baltimore 2, Maryland

CANCER OF THE COLON¹

HARVEY B. STONE, M.D.

The seriousness of an illness to the individual is measured by the nature of its course, its response to treatment and its probable outcome. The importance of a disease to the medical profession is determined also by the frequency

of its occurrence and by whether its incidence seems to be increasing or diminishing. By all of these tests cancer of the colon must be regarded as of major importance. To bear out one of these factors the statistics of the Department of Health of the State of Maryland for the years 1951-52-53 were consulted. During this period the total number of deaths recorded as due to all forms of cancer was 10,301. Of these 1070 were

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cancer of the colon. This works out to 10.4%. When it is recalled that cancer in all forms is now rated second or third in the national statistics of death-causes, it is easy to see that the disease we are discussing is of primary importance statistically.

The disease is also of primary importance because of the fact, that like all malignant disease, if not successfully treated, there is rarely any doubt that the final outcome will be fatal. What is of great interest and great importance is the further fact that the possibility of successful treatment is perhaps better here than in any other form of visceral malignancy. In cases that come to operation—and operation is the only method of treatment now offering any hope of success—before the process has extended too far, there is about a 50% chance of a five year survival, without evidence of recurrence. This is much better than the chances in cancer of the esophagus, stomach, or small intestine, or of the liver or spleen. From what has been said it is evident that cancer of the colon is worthy of the interest of all general practitioners.

No doubt many doctors grow weary of hearing that early discovery and prompt and effective treatment are essential to the successful handling of cancer cases, but weariness is no excuse for indifference to this basic fact. The practical difficulty, here as in many other forms of cancer, lies in the fact that the progression of the trouble may be almost symptomless for a goodly period. In fact it is probably true that such cancers cause very few symptoms until they are large enough to produce obstructive effects, or until systemic changes like anemia, loss of weight and failing general health develop. What then is there to look for, and how should the study be conducted?

The usual approach to an answer to these questions is to divide the problem into parts depending on the anatomical location of the lesion, since the clinical picture varies somewhat depending upon whether the growth involves

the right colon, the transverse or the left side. On the right side there may be some vague abdominal discomfort at times, that comes and goes, with occasional fleeting attacks of gaseous distention, but this may be completely lacking. A secondary anemia is quite frequent, in fact, when a patient presents himself with a secondary anemia of obscure origin, one of the possible causes that must be investigated is cancer of the right colon. Sometimes there is dull soreness in the right side of the abdomen or the right flank. There may be little or no alteration of bowel habits in cancer of the right colon, but occasionally bouts of either diarrhoea or constipation may be reported. Abdominal examination may be entirely negative. At times there is tenderness on deep pressure in the right side. Sometimes a mass may be felt, but in those cases where the growth originates on the posterior wall of the cecum or ascending colon, even a good-sized mass may not be palpable. This, of course, is especially apt to be the case if the patient is obese. Blood studies often show a secondary anemia that may be quite marked. The stools rarely contain visible blood, but tests for occult blood are quite often positive. X-ray examination is most helpful, but by no means infallible. Where there is good reason to suspect a growth in the right side of the colon, and routine barium enema studies are negative or inconclusive, the technique of air-inflation will often be revealing. If in spite of all examinations, no definite proof can be obtained but the history and physical findings strongly suggest a right-colon growth, exploratory laparotomy should be seriously considered, and is often justifiable.

Cancer of the transverse colon is not very different from that of the right colon. Growths here are more apt to form a palpable mass unless they originate from the bowel at or near the splenic flexure, where they are concealed from the examiner's touch by the overlying costal margin.

When the lesion involves the left colon—that

is, the descending colon and sigmoid flexure, certain features in symptomatology and diagnosis differ from those occurring in the right side. This paper will not deal with rectal cancer.

On the left side, perhaps because of the increasing solidity of bowel contents and decreasing diameter of bowel lumen, obstructive symptoms become more prominent. Crampy pains, gas gurgling and disturbance of bowel habits are more frequent and more pronounced. The patient may at times describe these symptoms by using the medical terms of diarrhoea or constipation. If questioned closely as to the actual disturbances they have noted, they often state that the desire to defecate is increased in frequency and urgency, but the actual passage of stool is reduced. Often, they state, the effort to have a bowel movement results in passing nothing but wind with perhaps some bloody mucus. The medical term for this situation of course, is neither diarrhoea nor constipation, but tenesmus. Since patients do not know the precise meaning of these words, it is well not to accept their use of any of them, but to get a clear description of what actually happens.

The cardinal symptoms, then, of left-sided cancer of the colon are those of partial obstruction, tenesmus, and the passage of blood and mucus. The methods of examination are the same as those already described for the other parts of the large bowel, plus the use of the sigmoidoscope. This is particularly valuable

when the lesion lies on the lower half of the sigmoid. This region is often difficult to study accurately by means of the x-ray, because of overlapping of loops on one another. However, it is often possible to get a very good direct visual inspection of this area through the proctoscope. This instrument also permits obtaining biopsy specimens which in doubtful cases may settle the diagnosis.

With the diagnosis established or highly probable, exploratory operation is nearly always the next step in the handling of the case. The exceptions are those patients who present clear evidence of the inoperable nature of the disease from extension to liver, lung or elsewhere. Even these may require surgical treatment of a palliative nature to relieve the pain and distress of obstruction. At exploration the surgeon must decide whether attempt at a radical removal of the disease is practical, or whether palliation by short-circuiting or colostomy is all that can be done. It should be said that the traditional objections to colostomy are no longer valid, and that this operation has a wide and important field of usefulness. As to the results of radical surgery, in brief it may be said that at present the mortality and morbidity have been greatly reduced, and as stated above, the long-range recovery with freedom from recurrence is about the highest of any form of cancer surgery.

18 West Franklin Street
Baltimore 1, Maryland

MENTAL ILLNESS 'GREATEST HEALTH PROBLEM'

The AMA Washington Letter, No. 84-12

According to a special Hoover Commission Medical Task Force report, mental illness is the greatest single problem in the nation's health picture. Prepared by Task Force Member Dr. Francis J. Braceland of Yale University, it is the basis of Commission recommendations on mental health made to Congress. If the present rate of mental illness continues, the report states, one in every twelve children born in the U.S. will spend some time in a mental institution, with about 250,000 persons being admitted this year. It cites the lack of trained personnel as the "most serious bottleneck" in the way of proper care for mental cases.

ARTICLES OF INTEREST

PROFESSIONAL LIABILITY INSURANCE: RATE INCREASE, ITS CAUSE AND SOLUTION¹

FRANK F. LUSBY, M.D. AND STANLEY H. MACHT, M.D.²

In 1929 there were approximately 400 mal-practice suits filed in the entire U. S. A. In 1952 there were over 4,000 cases (1). If one considers that 156,000 physicians are engaged in practice this would mean an average of one claim for every 30 physicians. To offset these figures, so far as Maryland physicians are concerned, are the facts that only 11 professional liability suits have ever reached the Court of Appeals in Maryland and only one of these has ever been upheld against a Maryland physician (2).

As a result of the large numbers of claims being filed in many metropolitan areas most physicians' professional liability insurance premiums have been raised two to five times the rates prevailing only a few years ago.

In Maryland for example, policy rates have increased as much as 261 per cent for Radiologists in the year of 1954 over the rates of 1951. Macht (3) in a survey of all radiologists in Maryland found threats of legal suits in only three instances in the experience of 57 Radiologists who had examined 3,870,260 cases for diagnosis and who had treated 181,751 cases during the 10 year period of 1943-53. Two of these threats were obvious fraudulent claims which never came to court and in which no financial settlement was ever made. The third case was a suit for an alleged x-ray burn during therapy; a suit which has not yet come to court.

In one state, premiums increased 850 per cent in 1952 (4). Experts conclude the problem is a serious national one for all physicians. It is predicted that soon mal-practice coverage will not be available from any company. It has even been suggested that Medical Societies enter the insurance business and

¹ Submitted November 30, 1954 for publication in the MARYLAND STATE MEDICAL JOURNAL.

² Director, Department of Radiology, Washington County Hospital, Hagerstown, Maryland.

issue protective policies for the members of the medical profession.

PRESENT PREMIUMS

Rates for Maryland are among the lower cost group. However, there are seventeen states with a lower rate. The cost in New York is about twice that in Maryland; the cost in California is about three times as much; Oregon about two and one-fourth times as much.

Rates as of March 1, 1954 by Lloyds of London were quoted as follows:

For Florida, New York, Illinois (\$25-75,000)
Physicians..... \$230.00
Surgeons..... 360.00
Radiologists
(doing any surgery)..... 690.00

For California 33½ per cent must be added to these figures; for all other states 25 per cent may be deducted. States with lower rates than Maryland are: Alabama, Connecticut, Delaware, Louisiana, Massachusetts, Michigan, Mississippi, Nebraska, New Hampshire, part of New Jersey, North Carolina, North Dakota, Pennsylvania, Rhode Island, South Carolina, Texas, West Virginia.

Recently, as a result of Macht's survey, Lloyds has offered the Maryland Radiological Society members a \$50,000/\$150,000 policy for a premium of \$150.00 a year.

CAUSE OF HIGH RATES

The following table is taken from figures supplied by the State Insurance Department of Maryland:

Year	No. Drs.	Losses	Costs per Policy
1948	748	\$ 1,668	\$ 2.23
1950-51	1,750	50,000	29.00 (company got \$13.52)

The losses stated above include all expenses; court costs, adjustors' fees, lawyers' fees, amounts paid to claimants in settlement, etc. No further breakdown of these figures could be obtained. The figures presented must be reconsidered when the following facts are made known;

1. Some companies total their experience with Dentists, Chiropractors, Osteopaths, Veterinarians, Hospitals, etc. all in one figure with their experience with medical doctors. It is, therefore, impossible to obtain any accurate figures from such companies so far as their experience with medical doctors alone is concerned.

2. There is one very big item to consider. All State Department of Insurance Agencies encourage a lumping of actual losses and reserves posted against future possible losses under the title "Incurred losses." A loss might therefore be apparent when actually a profit has been made by the company during a year when the company had threats of cases. For example, the threat of a \$75,000 suit is listed as a loss. The case may be settled for less at a later date. Under non-group selling a large part is consumed by actual selling and home office costs. This figure added to "incurred losses" can easily be made to show a loss.

3. The most potent factor is the ever spiraling inflation and dollar devaluation. Nuisance claims are very troublesome and costly. They run a long time, require frequent follow-up, require investigation and funds which have to be set up for a possible loss. Claims of admitted negligence can often be settled quickly, but these are few.

CAUSES OF SUITS

Studies show that 60 per cent of all suits are precipitated by or based upon comments made by other physicians about treatment the patient has received elsewhere. Excessive fees, fee disputes and unwise collection methods account for about 20 per cent of the suits. Other factors that may be listed as causes are as follows:

- a. Specialization which has led to medical fragmentation of the family unit with a loss of loyalty feelings on the part of the patient to any one family physician.
- b. The guaranteeing of results of treatment.
- c. The admission of negligence made by physicians within the patient's hearing.

d. The failure to use methods of diagnosis and treatment conforming to standards in the community.

e. The patient's idea of getting something for nothing; the "soak the rich" idea associated with the opinion that all doctors are rich and drive Cadillacs.

f. The feeling on the part of the patient that the doctor has not done his best; that he has been disinterested or callous.

g. The publicity that a few notorious mal-practice cases receive.

h. The increased public claim consciousness.

i. Bad public relations.

j. More liberal court interpretations broadening liability in the field.

k. Some adjustors want to rush out and talk to a possible claimant as soon as the doctor reports a possible suit, even though no legal action has been started. This is an open invitation to a claimant to start a suit. A seasoned, tactful and wise adjustor may spell the difference between a fair and honest settlement and a law suit.

HOW MAY PROFESSIONAL LIABILITY RATES BE REDUCED?

1. The number of claims must be reduced. The public is more claim conscious, physicians must be more on guard to prevent claims. This may be brought about by the following:

A. Every county medical society should have a long range active program to improve doctor-patient relations. This would include three main divisions:

- a. An active well publicized grievance committee.
- b. An emergency medical plan.
- c. A carefully operated collection bureau.

B. In the event that a physician is once found guilty of mal-practice if the situation is not serious enough to drop the doctor entirely 3 other things may be done:

- a. Reduce his policy limits to 5,000-15,000—he then surely would be more careful than if he had 100,000-300,000.
- b. Write a deductible clause of possibly \$1,000—in his subsequent mal-practice insurance.
- c. Deny protection to him for special things

- if he is not a qualified man in the particular field involved, as for example—x-ray therapy, plastic surgery, electroshock therapy, anesthesia, etc.
- C. Each local medical society should consider having a legal consultant on an annual retainer fee. This is a highly specialized field of law and an attorney's effectiveness usually bears a direct relationship to his experience and interest.
 - D. Physicians must constantly be careful of their comments since the origin of more than 60 per cent of all claims is in this area.
 2. Insurance companies should be prevailed upon to keep their professional liability experience with medical physicians separate from their experience with dentists, hospitals, veterinarians, chiropractors, etc.
 3. The State Insurance Commissioner should be prevailed upon to have the actual "Incurred Losses" reported by insurance companies consist

of only those expenses related to settling claims and not include home office costs related to actual selling of the insurance. Possible losses due to threats of suits should be excluded from "incurred losses" until the actual loss is sustained.

*230 N. Potomac Street
Hagerstown, Maryland
(Dr. Lusby)
Washington County Hospital
Hagerstown, Maryland
(Dr. Macht)*

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REPORT ON BACKGROUND OF HARRY M. HOXSEY AND HOXSEY CANCER CLINIC*

According to information in the files of the Food and Drug Administration, Harry M. Hoxsey is a native of Illinois, and his formal education terminated during the eighth grade. He claims to have obtained a high school diploma in 1917 after having taken a correspondence course. Between 1917 and 1923 he worked in coal mines and wrote insurance.

In about 1924 he began to promote his cancer treatment which he says was used by his father before him. Hoxsey testified in one trial in the Federal Court in the Northern District of Texas that his father had a small farm in Illinois, and that he was a doctor of veterinary medicine and had a number of other degrees. During an inspection in 1950, Hoxsey informed Food and Drug inspectors that he presumed his father was a medical doctor because he had an office and treated patients. Hoxsey added that in those days people did not go to school but simply got their degrees by taking examinations.

*Submitted by Federal Security Agency, Food and Drug Administration, Division of Medicine.

Prior to coming to Texas in 1936, Hoxsey had sold his medicine from state to state since the early twenties when it was known as the "Hoxide" treatment. He has been convicted of practicing medicine without a license in Illinois and enjoined in the State of Iowa. He was convicted three times in Illinois. In 1930, Hoxsey was associated with Norman Baker of Muscatine, Iowa, in the operation of a cancer clinic. Baker was subsequently convicted of violating the Iowa State Medical Practice Act and sent to a penal institution. Hoxsey was permanently enjoined from violating the Iowa State Medical Practice Act.

HOXSEY CLINIC

Hoxsey first appeared in Dallas, Texas, early in 1936 when he opened the Bryan Peak Cancer Clinic located at the corner of Bryan and Peak Streets, Dallas. The clinic at that time was housed in a small building with meager equipment. A fee of \$300 for the treatment was charged. Business

expanded, and the clinic was moved to its present location on Gaston Avenue in Dallas, where much larger and more elaborate quarters were available. About 1946, Dr. Joseph Durkee, an osteopath, associated himself with the Hoxsey Clinic and later became "Medical Director." It appears that the Hoxsey treatment at that time employed the same group of drugs in use at the time of the trial in Dallas.

HOXSEY MEDICINES

The Hoxsey medicines are of two types; one for internal and the other for external treatment. The external treatment is composed of several escharotics. This group of drugs was not an issue in the case.

The internal treatment is composed of two medicines known as the black or brown medicine and the pink medicine. The black or brown medicine is composed of cascara sagrada, potassium iodide, extracts of buckthorn, prickly ash, red clover blossom, alfalfa, sugar and water.

The pink remedy is composed chiefly of elixir of lactated pepsin containing variable amounts of potassium iodide. In addition to the above, which constitute the chief treatment, "supportive treatment" consisting of preparations containing iron, urinary antiseptics, vitamins, laxatives, and antacids is administered.

MODE OF OPERATION

In 1950, prior to the institution of the case in Dallas, the Government made an investigation of the manner in which the Hoxsey Cancer Clinic is conducted. The pattern of operation, with some modification, was the same for all patients. A patient is met at the entrance by a receptionist who prepares a card containing the usual data of name, address, etc. The patient then goes on to a "history clerk" who takes the patient's history stressing previous diagnosis and treatment, name of the physician, and whether or not a biopsy may have been performed prior to coming to the Hoxsey Clinic, and whether the biopsy report is available. From the history clerk the patient then goes to the laboratory for routine blood and urine examinations, and then to the X-ray department.

Inspectors were shown a large number of flat X-ray plates. Belt buckles, buttons and other articles were visible on many plates.

From the X-ray room the patient then goes to

the Medical Director, who, on the basis of the history and laboratory findings, makes the "diagnosis" and prescribes for the patient. Following this the patient then goes to the Business Manager, who arranges for the fee and its payment. Hoxsey stated while he was outlining this procedure that if the business manager experienced difficulty in arranging fee, payment, etc., the patient was brought into his office, where Hoxsey personally arranged for fees and payment.

On leaving the clinic, patients are given a paper shopping bag containing the so-called "supportive treatment" of vitamin preparations, laxatives, antacid preparations, and the cancer medicine (either the brown or pink solution) which is referred to as "the tonic." Usually a 30-day supply is provided. The patient is instructed to write to the clinic about his progress and to request additional medicine, which is shipped without further cost. This procedure may continue indefinitely, but some patients are advised that they are "cured" and discharged. Dr. Durkee testified that in the past five or six years he personally examined and treated five or six thousand patients, at the rate of 35 to 50 per day. At the time of trial the fee was \$400 per patient. Hoxsey's patients come from practically every state in the country.

TRIAL

The trial was based on the grounds that pamphlets and booklets used by Hoxsey constituted labeling which was false and misleading and misbranded the drugs when shipped in interstate commerce. These booklets contained testimonials from many allegedly cured patients. An extensive investigation was carried out involving more than 100 Hoxsey patients. At the trial much evidence was presented on results of experiments showing the ineffectiveness of the Hoxsey drugs, and the testimony of many medical experts was offered. Specialists who testified for the Government included:

Dr. G. B. Mider, now Research Director of the National Cancer Institute

Dr. R. L. Clarke, Director of the M. D. Anderson Hospital, Houston

Dr. David I. Macht, Sinai Hospital, Baltimore

Dr. M. A. Goldzieher, New York

Dr. W. S. Murray, Jackson Memorial Laboratory, Bar Harbor, Maine.

In addition to the foregoing, more than 50 physi-

on all 4 counts

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*REG. U. S. PAT. OFF.

cians from throughout the country gave of their time to testify for the Government. Many months of intensive work was required to prepare the case for trial. One Food and Drug inspector drove more than 17,000 miles to interview Hoxsey patients and physicians who had treated them at one time or another.

The Government presented scientific evidence that Hoxsey's claimed "cures" fell into three categories: They included patients who had never had cancer and were treated for it at the Hoxsey Clinic; patients who had been cured of cancer before they went to the clinic and were treated for cancer; and patients who had cancer and still have it or who died under the Hoxsey treatment. In this connection, the Government presented the physicians who

attended these patients and the hospital records connected with them, and pathologists who examined the tissue to make the diagnosis of cancer.

PREVIOUS ACTION AGAINST HOXSEY DRUGS

On April 19, 1950, a U. S. Marshal seized shipments of the escharotic drug and the internal treatment in the possession of Dr. Linwood E. Downs, an osteopath, located at 1076 East Colfax Ave., Denver, Colo. Dr. Downs had previously taken a short course of "training" at the Hoxsey Cancer Clinic. The drugs had been shipped by Hoxsey to Downs, who was using the Hoxsey treatment for patients having cancer. This seizure action, brought under the misbranding provisions of the Federal Food, Drug, and Cosmetic Act, was not contested.

REINSURANCE AND MORTGAGE GUARANTEES INCLUDED IN BUDGET

The AMA Washington Letter, No. 84-4

Publication of the Administration's budget for the next fiscal year, starting on July 1, discloses that the White House later will ask Congress to authorize \$25 million (the same as last year) to start a reinsurance fund for voluntary health plans and \$10.5 million to guarantee private mortgages on health facilities.

Exact details of the two programs will become known when bills are introduced in Congress. The two items were not a part of the budget proper, but a statement included in the budget said they would be requested at a later date. The new reinsurance bill will emphasize (a) protection for low income and rural families, (b) help to other groups difficult to insure, and (c) promotion of major medical expense insurance. The fund's capitalization is authorized at \$100 million. The mortgage guarantee fund's liability would be limited to \$200 million, unless the President approved an increase to \$350 million. The Administration also will ask \$20 million to improve the medical care of public assistance recipients, with the states matching on a 50-50 basis, and \$16.5 million for grants to states to help in nurse training and nurse utilization, in special public health projects and in water pollution and maternal and child health and welfare services.

Special Article

PREVENTION OF RHEUMATIC FEVER*

Recurrences of rheumatic fever are preventable in most instances if proper steps are taken to control streptococcal infections. Two methods are now available for control of such infections as related to rheumatic fever:

The prevention of streptococcal infections in known rheumatic patients through the continuous use of chemotherapeutic or antibiotic agents. This is a proved method and represents the most important advance in the care of rheumatic fever patients in the last two decades.

The early and adequate treatment of streptococcal infections in all individuals, but especially in rheumatic fever subjects and in families susceptible to rheumatic fever.

PREVENTION OF STREPTOCOCCAL INFECTIONS

General Rules for Prophylaxis

Selection of Patients

All individuals under eighteen years of age who have a well established history of rheumatic fever or chorea, or who have rheumatic heart disease.

All individuals over the age of eighteen who have had an attack within five years.

Initiation of Prophylactic Treatment

Prior to the start of prophylaxis, beta hemolytic streptococci should be eliminated from the throat by the use of therapeutic doses of penicillin for a period of ten days. This applies to patients at the onset of an acute attack, or whose throat cultures indicate the presence of streptococci.

Prophylaxis should be started immediately thereafter, irrespective of whether the patient is in the active or quiescent phase of the disease.

* Submitted by The Heart Association of Maryland.

Length of Treatment

In adults, prophylaxis should be carried out for a period of at least five years from the last attack.

In children, prophylaxis should be continued at least until the age of eighteen.

Treatment should continue throughout the year, including the summer months.

Exceptions to Continuous Prophylaxis

Patients who are being followed as rheumatic suspects should be on prophylactic treatment until a conclusion has been reached that they are not suffering from rheumatic fever, at which time treatment may be discontinued.

Prophylactic Methods

Penicillin

Sufficient information has been accumulated to indicate that long-acting oral and intramuscular penicillin are effective prophylactic agents. Penicillin has the advantage of rarely producing serious toxic reactions. It is desirable also for its bactericidal effect on the hemolytic streptococci, as well as the fact that no penicillin-resistant strains have yet been encountered.

Penicillin has the disadvantage of being more costly, but the overall cost may not be greater since laboratory follow-up is unnecessary. For the majority of individuals the oral method of administration is preferable. Intramuscular injection of long-acting penicillin is advisable in those patients who have proved uncooperative in taking daily medication.

Dosage

Long-Acting oral penicillin. Benzathine Penicillin G tablets (trade name: Bicillin, Wyeth) 200,000 units, once a day, at breakfast.*

* Note: The standard penicillin G tablets may be used, and present recommendations suggest that 200,000 unit tablets be given at least twice a day, preferably before meals.

Intramuscular penicillin. By injection, Benzathine Penicillin G, 1,200,000 units once a month (trade names: Bicillin, Wyeth; Permapen, Pfizer).

Toxic reactions

Urticaria

Serum-sickness-like reactions

Angioneurotic edema

When reactions to penicillin occur or if there is a history of previous reactions to this antibiotic, prophylactic treatment should be continued with sulfadiazine.

Sulfadiazine

The advantage of this drug is that it is inexpensive. The main disadvantage is the possibility of toxic reactions. Although such reactions are not common with this particular sulfonamide, it is still necessary to follow the patient's blood count. This adds to the total cost of the prophylactic program. In addition, the fear of toxic reactions has made many physicians reluctant to use a sulfonamide over a long period of time. This has diminished its effectiveness as a prophylactic agent for general use. For these reasons, oral penicillin is recommended as the drug of choice. Sulfadiazine represents a valuable alternative agent for those who cannot tolerate penicillin.

Dosage

From 0.5 to 1.0 gram taken once a day. The smaller dose is for children under 60 pounds.

Toxic reactions

Skin eruptions: morbilliform, urticarial, or scarlatiniform. If any of these rashes occur, it is not safe to continue the drug.

Leukopenia: discontinue drug if the white blood count falls below 3500 and the polymorphonuclear cells below 35%. White blood counts are advisable every week for the first six weeks and at least every three months thereafter.

Hematuria: This is an extremely rare toxic reaction but may occur at the onset of treatment. Discontinue the drug if gross hematuria occurs.

Other Medication

In the rare patient who is sensitive to both penicillin and sulfadiazine, aureomycin may be used. (The other broad-spectrum antibiotics may be effective, but no clinical trials have been carried out.)

TREATMENT OF STREPTOCOCCAL INFECTIONS

It has been shown recently that early and adequate treatment of streptococcal infections will prevent rheumatic fever and will eliminate the organisms from the throat. The diagnosis of streptococcal infections can often be made clinically. However, even in doubtful cases, treatment should be instituted, especially in rheumatic fever subjects or members of families susceptible to rheumatic fever.

Penicillin is the drug of choice for treating streptococcal infections.

Treatment should be started immediately and should provide penicillin protection for a period of ten days. Treatment for a shorter period of time will not eradicate the streptococci from the throat.

Recommended Treatment Schedules

Intramuscular Penicillin

Benzathine penicillin

Children: one intramuscular injection of 600,000 units.

Adults: one intramuscular injection of 1,200,000 units.

Procaine penicillin with aluminum monostearate in oil.

Children: one intramuscular injection of 300,000 units every third day for three doses.

Adults: one intramuscular injection of 600,000 units every third day for three doses.

Oral Penicillin

Benzathine Penicillin G tablets (Bicillin, Wyeth) 200,000 units every six hours, three times a day, for a period of ten days.

Other Medication

The broad-spectrum antibiotics are less effective than penicillin and should be used only if the patient is allergic to penicillin. Terra-

mycin, aureomycin and erythromycin have been shown to be effective in decreasing the incidence of rheumatic fever. When using these drugs, full therapeutic dosage should be given for a period of ten days. There is some evidence suggesting that sulfonamides may not prevent rheumatic fever when used to treat acute streptococcal infections and therefore antibiotics are preferable for this purpose.

GENERAL HAYS BECOMES ARMY SURGEON GENERAL JUNE 1

The AMA Washington Letter, No. 84-12

Major General Silas B. Hays, nominated by President Eisenhower March 11 to be Army surgeon general, is scheduled to assume his new post June 1. He succeeds Major General George E. Armstrong who retires after 29 years Army service to become associate chancellor and medical activities coordinator of New York University. General Hays, a native of St. Paul, Minnesota received his medical degree from the University of Iowa in 1928, and after interning at Letterman General Hospital in San Francisco, received a commission in the regular Army in 1929. He was chief of medical supplies in Europe during World War II and surgeon of the Japan Logistic Command during the Korean War.

THE HEBREW MEDICAL JOURNAL COMMEMORATES THE 750TH ANNIVERSARY OF MAIMONIDES' DEATH

The Hebrew Medical Journal, under the editorship of Moses Einhorn, M.D. of New York, has marked its twenty-seventh year of existence by the issue of two volumes in 1954. Written in Hebrew, with English summaries, the journal has played an important part in the creation of a medical literature and terminology in the language of the Bible.

Besides the usual sections on medical subjects, "Israel and Health," "Talmudic Medicine," "Old Hebrew Medical Manuscripts," this issue contains a special section on Maimonides, the renowned Jewish medieval physician and philosopher, in commemoration of the 750th anniversary of his death.

The editorial office of the Hebrew Medical Journal is at 983 Park Avenue, New York, N. Y.

Letter to the Editor

March 7, 1955

Maryland State Medical Journal
1211 Cathedral Street
Baltimore 1, Maryland

Dear Sirs:

For whatever copy you wish to make of it I would like to inform you concerning recent events in Anne Arundel County which attended the introduction into the Maryland House of Delegates of proposed alterations in the present adoption law. These changes were advocated by a joint commission appointed by the Governor and comprised of doctors, lawyers and other interested individuals. The reaction locally was not to the changes which were being advocated to strengthen and implement the law but rather to a defect in the original law which was being perpetuated, i.e., that which had to do with placement.

The fact that the medical reaction against this portion of the law took this belated occasion began with the discovery in Harford County that the law was impractical and that the placement mechanism as strictly specified was wholly inadequate. An amendment was therefore proposed by the Harford County Delegation stipulating that in Harford County it would be lawful for doctors, lawyers and clergymen to participate in placement. The action of the Harford County Delegation spotlighted three points, previously obscured and neglected.

The one was that whereas in Baltimore City, where there are many agencies working in this field, the law is effective, that in other areas it was either impractical or impossible. This in a certain sense could be construed as encouraging illegal dealings in babies.

The second point is that it made evident the fact which had not been appreciated before, even by some of the members of the Governor's commission that doctors were being excluded from participating in

placement and that it was actually being made unlawful for them to do so.

The third point is that in our efforts to eliminate black-marketing we were creating a bureaucratic situation in which the whole subject of adoption was left to the relatively uneducated discretion of the social agencies.

On the basis of the Harford County proposal a similar action was taken by the Anne Arundel County Medical Society which adopted a resolution recommending to the Anne Arundel County Delegation that similar legislation be adopted for this County. It should be interjected at this point and strongly emphasized that neither of these two proposals took any exception to the law as outlined or its purpose except as regards the single issue of placement. It should also be noted that whatever the placing agent the remainder of the mechanism including the investigation of the home by the Welfare, followup, legal procedures, etc., would be exactly the same and would continue to control any question of blackmarketeering.

A hearing was held by the Anne Arundel County Delegation which was attended by Dr. Phillip Briscoe, local pediatrician and President of the Anne Arundel County Medical Society, the writer, and other interested individuals including representatives of the Welfare, locally. At the conclusion of this airing of the issues involved the decision of the Anne Arundel County Delegation was that it was impractical and unwise to make local exceptions. However, sympathy was expressed for the position of the doctors and it was felt by at least several of the legislators that some alteration should be made in the law in order to make it more practical in rural areas and to include the right of physicians to participate in placement.

Sincerely yours,
Stuart M. Christhilf, Jr., M.D.
Vice President, Anne Arundel
County Medical Society

Component Medical Societies

ALLEGANY-GARRETT COUNTY MEDICAL SOCIETY

LESLIE E. DAUGHERTY, M.D.

Journal Representative

Dr. S. G. Weisman, local physician, was guest speaker at a recent meeting of the Cumberland Kiwanis Club. Dr. Weisman spoke on "Heart Disease and the Businessman."

In the course of his remarks, Dr. Weisman acknowledged that heart disease is still a major killer, but cited improvements made in research and education through the assistance of the National Heart Association and local affiliates like the Allegany County Heart Association.

Dr. Weisman stated that two-thirds of the persons who suffer heart attacks have no lasting ill effects and about one-third of these are able to hold down jobs requiring the lifting of heavy equipment and that many persons with heart ailments are able to live long and useful lives.

Dr. Benedict Skitarelic spoke at the February meeting of the Alumnae Association, of Sacred Heart Hospital.

Dr. Skitarelic's subject was "The R-H Factor, Its Significance, and Its Application in Modern Medical Practice."

BALTIMORE CITY MEDICAL SOCIETY

CONRAD ACTON, M.D.

Journal Representative

No further word has been had about the St. Paul Street doctor eviction.

It was unanimously voted to invite the Southern Medical Association to hold its 1958 meeting in Baltimore. There had been some discussion about distinctions between Association members and Baltimore City Society members at the meetings. When it was established that all City Society members would be invited to all scientific functions at the Association meetings, the bid to meet here was extended.

President Koontz suggested that programs of the City Society be sent to the County members. This was unanimously approved.

The matter of fees for the Postgraduate Courses was gone into and at the suggestion of the Post-graduate Committee it was moved to allow a charge of not more than \$10.00 for a course.

A Television program was proposed for this Spring and Fall. It was felt that the City Society, through Dr. H. Hanford Hopkins and the Committee on Public Medical Education, could make good use of this time to promote better public relations.

The Scientific Meeting on March 4 was "Residents' Night." It had been hoped that Mayor D'Alesandro would be on hand to present the Proclamation of March 30 as Doctor's Day. The Woman's Auxiliary, through its energetic President, Mrs. E. Roderick Shipley, had arranged an appropriate ceremony and had obtained red carnations for distribution. The Proclamation was read by Mrs. Shipley and accepted by President Koontz.

Of 14 submitted, three papers by Residents were selected. "Hematoxyrins in Carcinoma" by G. C. Peck, M.D., of the University of Maryland Hospital; "Factitial Surgical Diseases" by R. S. Seaton, M.D., of the Church Home Hospital; and "Critique of Lumbar Sympathectomy" by A. R. Nelson, M.D., of the Johns Hopkins Hospital, were ably presented and well discussed by the small but appreciative audience.

In February the Executive Board considered the Re-insurance Plan then under consideration in Congress. Drs. Hopkins' and Futch's critiques of it were read. The secretary was instructed to contact the Maryland Association of Insurance Agents for an opinion, particularly as to the possibility of carrying out this re-insurance at State level.

The March meeting of the Executive Board was on Tuesday, March 22. The Federal Re-insurance Program was vigorously opposed on the basis that (1) it did not provide care for the medically indigent, and (2) it was not necessary as complete coverage was available from private insurance companies.

Informative pamphlets were finally reported on, and Dr. Hopkins' Committee on Public Medical

Education was given authority to have them printed and distributed.

A further change in the Constitution was proposed and forwarded to Dr. Paulson, Chairman, Constitution Committee, for proper phrasing and processing. It sets up an ex-officio Nominating Committee of the last five living and available past presidents. The selection of a Nominating Committee at random by a President was felt not to be too sound a practice for the furthering of Society activities and objectives.

Authority to reappoint the Committee for the Boy Scout Camp was voted.

A cocktail party to the County Members at the Annual Meeting prior to the Friday night dinner was voted. This will in small part return the hospitality extended by the County Members at the Semi-Annual Meetings, and should be an annual affair.

The withdrawal of American Hospital Association approval of a local hospital for residency training in medicine, because it lacked clinics or affiliation in allergy and psychiatry, was brought up and the arbitrary standards of this organization were discussed. A committee was appointed to study the situation and contact the Baltimore Council on Hospitals for effective action.

The Board emphatically favored HB 521 pending before the Maryland legislature to discontinue the Homeopathic Board of Medical Examiners. That Board had been defunct until 1953, when it was reactivated and began examining allopaths as well. It was felt to offer a particular hazard as a potential premature licensing channel for refugee physicians of substandard qualifications.

On information that the cities for the 1958 and the 1959 Southern Medical Meetings had been selected, it was voted to send an invitation for 1960.

CECIL COUNTY MEDICAL SOCIETY

MILFORD H. SPRECHER, M.D.

Journal Representative

Dr. Helen Taussig, physician-in-charge, Cardiac Clinic, Johns Hopkins Hospital, addressed the Cecil County Medical Society at a dinner-meeting at the North East River Yacht Club, on March eleventh.

Her subject was "Continuing Prophylaxis in Rheumatic Fever."

Dr. R. C. Dodson, president of the society, presented Dr. Taussig to the meeting of sixty persons including the members and their wives. Cecil county dentists and pharmacists, personnel of the State Public Health Department, the U. S. Veterans Administration at Perry Point, and the U. S. Naval Training Center at Bainbridge also were present.

The president of the Society urged attendance at the Annual meeting of the State Society in April, and announced that Dr. I. Ridgeway Trimble would be the speaker at the meeting in May.

DORCHESTER COUNTY MEDICAL SOCIETY

LAWRENCE MARYANOV, M.D.

Secretary

1. The regular meeting of the Dorchester County Medical Society was held at the home of Dr. Bunker.

The meeting was called to order by the president, Dr. Wolff.

Those present were Drs. R. D. Brown, Bunker, Burdette, Currier, Frank W. Davis, Hanks, J. Walter Hastings Jr., James Johnson, Kenneth Jones, Mace, A. Maryanov, L. Maryanov, Meekins, Frederick Miller, Reddick, Thompson, Verkutis, West Sr., E. Winiarz, W. V. Winiarz and Wolff.

2. The following three resolutions submitted to the Faculty were unanimously approved by the Society.

a) A resolution suggesting that a recognized division of the fee between physicians be worked out to commensurate with the service involved.

b) A resolution to establish a committee on Geriatrics and Gerontology.

c) A resolution regarding the establishment of a school of physical therapy at the University of Maryland.

3. Dr. Bunker stated that he had contacted Mr. Herbert Travers in reference to malpractice insurance rates, and that Mr. Travers would get in touch with his company to determine whether the Society rates could be reduced.

4. A letter from Dr. George Yeager, president of the Faculty was read urging the County members to attend the State Medical Meeting in April.

5. Dr. Wolff appointed a program committee consisting of Drs. Burdette, *Chairman*, Mace and Baumann.

6. Dr. Burdette, chairman of Public Relations Committee, stated that the American Medical Association had available for the public, exhibits, posters, and movies, and that some would be obtained for use in this county.

7. Dr. Hastings, Jr. gave an informal talk on Rabies. He stated that there were no cases in Dorchester County, at the present time. Last year, there were 5,700 cases of rabies in dogs in the U. S., and there were 12 human deaths as a result thereof.

8. Dr. Frank W. Davis, our guest speaker, gave a talk on "Valvular and Mitral Heart Disease." He stated that there were 1,000,000 people in the United States with Mitral Stenosis and that 10,000 of those will die this year. His talk consisted of the surgical treatment of Mitral Stenosis with its indications. It was noted that 70 per cent were moderately and greatly improved after surgery which consisted of Mitral Commissurotomy.

The meeting adjourned at 10:00 p.m. Following this, refreshments were served.

FREDERICK COUNTY MEDICAL SOCIETY

LOUIS R. SCHOOLMAN, M.D.

Journal Representative

The January meeting of the Society was held on the 18th with the new president, Dr. Thomas H. Quill presiding. The speaker of the evening was Dr. O. R. Langworthy, psychiatrist of Baltimore who conducts the local Mental Hygiene Clinic. He spoke informally on the various cases treated in the clinic. The meeting was well attended; 28 members were present.

The February meeting was held on the 15th. The speakers were Drs. Tuohy, Sessoms and Warkins of the National Cancer Institute. They described their physical plant and specified the particular type of malignancy they wished referred. 29 members were present.

The Society welcomed the return of two former members and the arrival of two new members.

Dr. Howard W. Ash, University of Pennsylvania

'35, had done general practice here from 1937 to 1951. After studying for 3½ years at the Illinois Eye and Ear Infirmary in Chicago he started practicing ophthalmology here in January.

Dr. Robert J. Turner, Medical College of Virginia '49, had done 1½ years of general practice here before he was called back into the Navy. After 2½ years of Service he studied obstetrics in Baltimore for 5 months before resuming general practice here.

Dr. Karl H. Tannenbaum, Johns Hopkins '18 had practiced 33 years in Chicago before retiring to live in Frederick. He missed the harness so much that he has resumed practice here.

Dr. Thomas H. Reid, Albany Medical College '49, has come to Frederick as an associate of Dr. E. T. Campbell in the practice of Roentgenology.

Dr. Merritt E. Robertson was critically injured February 7th when his car skidded on ice while returning from a delivery in the hospital. He was treated for hemorrhage and shock at the Frederick Memorial Hospital and then transferred to the University Hospital. His condition is still grave. □

Hospital Events

The Administration and Medical Staff of the Frederick Memorial Hospital announce with some pardonable satisfaction and pride full accreditation by the Joint Commission on Accreditation.

The active staff of the hospital met March 7th and elected Dr. Byron D. White, Chief of Staff. He succeeded Dr. Austin A. Pearre who had served the maximum time permitted by the constitution. The other officers were Dr. Thomas H. Quill, vice chairman, and Dr. Henry V. Chase, secretary.

The capping of 12 student nurses was held March 2nd. Dr. Frank D. Worthington presided and was speaker of the evening. The ceremony was impressive and charming at the same time. The ritual of capping was deftly performed by three senior student nurses to the accompaniment of soft music.

At the regular January clinical pathological conference, Dr. Robert J. Furie, full time pathologist and Director of Laboratory, presented a case of acute disseminated lupus erythematosus. It was very promptly diagnosed by the staff. Dr. Furie then discussed collagen diseases in general. The case presented at the February C.P.C. was a puzzler. After the staff had batted about the paradoxical combination of uremia and hypotension a member ventured

the correct diagnosis of amyloidosis. A discussion of its pathogenesis followed. The case at the March C.P.C. threw the whole group for a loss perhaps because of the statement in the protocol of a fair concentration of trypsin in the stool. It turned out to be a case of congenital pancreatic fibrosis.

The department of medicine is now attending a series of lectures by Dr. Furie on the physiology and pathology of the liver. A course on electrolytes and fluid balance he gave last year was so highly valued that he was asked to broaden the scope of subjects. Your correspondent can testify that never did he learn so much in so little time.

MONTGOMERY COUNTY MEDICAL SOCIETY

MAYNARD I. COHEN, M.D.

Journal Representative

The subject of the March meeting of the Montgomery County Medical Society was "Intracardiac Surgery under General Hypothermia." The panel consisted of Dr. John Nestor, Dr. Charles Fierst, Dr. Bernard Walsh and Dr. Edgar Davis, with colored motion picture film by Dr. Jonathan Williams.

The following members were elected to serve as the Society's officers for 1956:

<i>President</i>	Dr. Robert Bier
<i>Vice President</i>	Dr. Merrill Cross
<i>Secretary</i>	Dr. William Welsh
<i>Treasurer</i>	Dr. Stephen Jones

<i>Delegates</i>	<i>Alternates</i>
Dr. McKendric Boyer	Dr. W. Murphy
Dr. Reed Calvert	Dr. J. Robben
Dr. J. Bird	Dr. Merrill Cross
Dr. J. G. Ball	Dr. A. Rohrbaugh

Board of Censors

Dr. W. Eastman	Dr. G. Maxwell
Dr. R. Bier (to be filled for one year by Dr. Hare)	Dr. H. Laughlin

Dr. H. King Vann and Dr. John Louzan have become affiliate members of the Society. Dr. Thomas G. Edison became an active member by transfer.

Dr. Claude Mitchell has retired from active practice. He is a Life Member of the Montgomery County Medical Society and was recommended for an Emeritus membership of the Medical and Chirurgical Faculty.

WICOMICO COUNTY MEDICAL SOCIETY

WILLIAM S. WOMACK, M.D.

Journal Representative

A meeting of the Wicomico County Medical Society was held at the Watson Memorial Building, Salisbury, on February 14, 1955. Twenty-two members and three guests were present.

During the past six months there have been three new members elected to this Society. They are as follows: Dr. William S. Womack, Obstetrician and Gynecologist; Dr. Theodore Smith, Anesthetist; Dr. Rufus Gardner, Internal Medicine.

Dr. Seth Hurdle, the County Health Officer, reported on a study of infectious hepatitis in our community. Recently we have had an outbreak in Salisbury, and it was interesting to note that the bulk of the cases occurred in patients living outside of the city limits connected with one school.

Dr. Briele, who has just recently returned from a trip in New York, at which time he visited Memorial Hospital, recommended to the Society that a program relative to public education on cancer be prepared. This was discussed at some length, and Dr. I. Rivers Hanson suggested that the medium of television might be used in this connection.

Dr. Fisher, our President, was to appoint a committee to study this recommendation.

The speaker of the evening, Dr. R Adams Cowley, Associate Professor of Surgery at the University of Maryland Hospital, was introduced by Dr. David Gilmore. Dr. Cowley gave a very interesting talk on the "Surgery of Vascular Lesions," which was illustrated with slides and a motion picture.

Necrology

A. S. CHALFANT, M.D., *Chairman*

Memoir Committee

ROBERT VICKERY PALMER, M.D.*

1872-1955

Dr. Robert Vickery Palmer, who began his career as a country doctor in St. Mary's fifty-nine years ago, died in the University of Maryland Hospital in Baltimore, February 19, 1955, at the age of eighty-three.

A native and resident of Palmers, Maryland, a town named for his family, Dr. Palmer was the first physician in St. Mary's to apply for a license to practice. "When I did so," he once related, "the clerk didn't know what to do with me."

Dr. Palmer got his early education at Charlotte Hall Military Academy and was an 1896 graduate of the University of Maryland Medical School. Hanging out his shingle as a general practitioner in the rural area around Palmer, he became one of the busiest and best-loved doctors to be found anywhere.

He was one of 16 children of John and Elizabeth Frances Palmer. At an early age, he made up his mind to become a doctor. Beginning his career in the horse-and-buggy days, Dr. Palmer at various times made his calls on foot, on horseback, by buggy, motor boat and, eventually, by car—sometimes a jeep. He was known among the great number who came to his funeral as the "doctor who never turned down a case."

Dr. Palmer became a trustee of Charlotte Hall and is said never to have missed an alumni meeting following his graduation. He was a member of the Medical and Chirurgical Faculty of Maryland, a trustee of the St. Mary's Seminary Junior College and was chairman of the board of the County Trust Company in Mechanicsville.

* Excerpts from a newspaper article reprinted by courtesy of the *St. Mary's Enterprise*, Lexington Park, Maryland.

AMA URGES APPROVAL OF CIVIL DEFENSE FUNDS

The AMA Washington Letter, No. 84-12

American Medical Association has urged House and Senate Appropriations Committees to approve funds for medical activities of the Federal Civil Defense Administration. In identical letters to chairmen of the two committees, AMA Secretary and General Manager George F. Lull stated it was futile to plan for the medical phase of civil defense unless the profession "has available the supplies necessary to perform its work." He added: "It is essential that sufficient funds be authorized for the stockpiling of necessary medical supplies and equipment if we expect to sustain the interest of the profession and to utilize physicians advantageously in the event of a disaster." For fiscal 1956, the administration has asked Congress for \$35.3 million to run FCDA, an increase of nearly \$10 million over funds available for this fiscal year.



Library



"Books shall be thy companions; bookcases and shelves, thy pleasure-nooks and gardens." *ibn Tibbon*

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- * Bibliography prepared by Miss Myrtle B. Hollins of the library staff.
- (to be continued)

NEW SUBSCRIPTIONS

In January 1954 we published a list of new periodical subscriptions in the JOURNAL. Since that time the following have also been added to the library.

- American Journal of Clinical Nutrition
 Excerpta Medica: Cancer (This is a new section)
 Fertility and Sterility
 International Journal of Anesthesia
 Journal of Chronic Diseases
 Journal of the National Medical Association
 Pediatric Clinics of North America

MRS. HOBBY OUTLINES PROGRAM, DEFENDS REINSURANCE PLAN

The AMA Washington Letter, No. 84-10

Testifying before the House Interstate and Foreign Commerce Committee, Secretary Hobby of the Department of Health, Education, and Welfare outlined the President's health program and under committee questioning defended his plan for a federal reinsurance service. She said part of the trouble last year (when the bill was defeated) was that its critics "didn't understand it." She doesn't expect the same criticism this year. Reminded that the AMA still opposes the idea, she said she and her staff had talked with AMA people two or three times since last session, and that it is her belief that AMA witnesses this year won't regard reinsurance as "an opening wedge" for socialized medicine. Mrs. Hobby also told the committee: 1. First year's cost of the total program would be \$71,750,000, and she would prepare an estimate of long-range cost. 2. One of the objectives of reinsurance is to learn whether more low-income families can't be induced to carry health insurance. 3. The role of the federal government in the health fields should be "research, information services and leadership to stimulate states and local communities to keep up on what we know are their responsibilities." 4. Her selection (under protest) of the most important sections of the omnibus health bill are reinsurance and guarantee of mortgages for health facilities.

Health Departments

BALTIMORE CITY HEALTH DEPARTMENT

Venereal Diseases in Baltimore—1954

The City's venereal disease record for 1954 prepared by Dr. Nels A. Nelson, Director of the City Health Department's Bureau of Venereal Diseases is of great interest and some of its major findings are as follows:

The astonishing nine year decline in the reported incidence of syphilis cases in Baltimore appears to be coming to an end. A clear explanation of the decline and its apparent cessation is very difficult to give. Syphilis cases reported in the city were by years: 1946, 5,558; 1947, 5,394; 1948, 4,745; 1949, 4,327; 1950, 2,982; 1951, 2,627; 1952, 1,982; 1953, 1,336; 1954, 1,283.

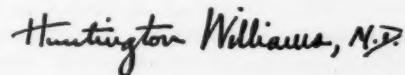
Even more difficult to explain clearly is that reported infections of gonorrhea over the same years has shown no decline, indeed has shown a very considerable increase, from 4,025 in 1946 to 7,105 in 1954.

Not a single case of syphilis in the first year of life was reported in the city in 1954, the first such record. This has resulted largely from expanded prenatal care services. No infant death from syphilis has occurred in Baltimore since 1950.

The number of patients admitted to the Health Department venereal disease clinics has remained almost constant since 1948 when it reached a high point, 11,297 persons having been admitted in 1954.

It was necessary to invoke the City Isolation Ordinance on two occasions in 1954, and with the assistance of the Juvenile Court to persuade the mothers of 16 children to have them examined for syphilis. The Health Department and the Armed Forces collaborated in the investigation of 628 contacts of infected military personnel and in the examination of 42 selectees and 66 separatees found to have evidence of infection with venereal disease. A total of approximately 8,500 contacts were investigated during the year.

Reports from a majority of the states seem to indicate that not only has the decline in the reported incidence of syphilis come to a halt, but that the incidence, especially of early syphilis, is increasing. It is clear, in Baltimore, that the decline has ended, for the time being at least, since approximately the same number of cases of early infectious syphilis has been reported in each of the last three years. Only time can tell whether the decline will be resumed, or whether the incidence will now increase, or whether an irreducible minimum has been reached. Gonorrhea still shows only slight signs of responding to control procedures; in fact some communities report a sharply increasing incidence of this disease. We are fortunate, in Baltimore, that we are organized and equipped to meet whatever may develop.



Commissioner of Health

STATE OF MARYLAND DEPARTMENT OF HEALTH
MONTHLY COMMUNICABLE DISEASE REPORT

Case Reports Received during 4-week Period, April 1-28, 1955

	CHICKENPOX	DIPHTHERIA	GERMAN MEASLES	HEPATITIS, INFECT.	MEASLES	MENINGITIS, MENINGOCOCCUS	MUMPS	POLIOMYELITIS, PARALYTIC	POLIOMYELITIS, NON-PARALYTIC	ROCKY MT. SPOTTED FEVER	STREP. SORE THROAT INCL. SCARLET FEVER	TYPHOID FEVER	UNDULANT FEVER	WHOOPING COUGH	TUBERCULOSIS, RESPIRATORY	SYPHILIS, PRIMARY AND SECONDARY	GONORHEA	DEATHS	
Total, 4 weeks																			
Local areas																			
Baltimore County	75	—	37	—	31	—	47	—	—	—	39	—	—	4	11	—	3	—	7
Anne Arundel	3	—	1	—	14	1	1	—	—	—	6	—	—	2	1	4	—	—	1
Howard	5	—	—	—	—	—	—	—	—	—	2	—	—	2	3	—	—	—	3
Harford	1	—	3	2	—	1	1	—	—	—	3	—	—	—	2	—	1	—	3
Carroll	—	—	—	3	—	—	3	—	—	—	8	—	—	—	—	—	1	—	1
Frederick	11	—	—	6	45	—	65	1	—	—	49	—	—	—	1	—	—	—	—
Washington	1	—	—	—	—	—	1	—	—	—	1	—	—	1	4	—	2	—	—
Allegany	1	—	—	—	—	—	—	—	—	—	10	—	—	2	—	—	—	—	—
Garrett	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Montgomery	39	—	8	10	57	—	7	1	—	—	67	—	—	2	5	—	2	—	3
Prince George's	29	—	2	—	40	—	11	—	—	—	29	—	—	1	6	—	2	m-1	1
Calvert	—	—	—	—	—	—	—	—	—	—	1	—	—	2	—	—	1	—	—
Charles	4	—	—	1	29	—	3	—	—	—	—	—	—	1	—	—	—	—	1
Saint Mary's	16	—	5	4	5	—	18	—	—	—	40	—	—	1	—	—	—	—	—
Cecil	3	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	2
Kent	2	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—
Queen Anne's	—	—	—	—	—	—	2	—	—	—	—	—	—	—	1	—	—	—	—
Caroline	1	—	—	—	—	1	—	6	—	—	4	—	—	2	1	—	3	—	—
Talbot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	4	—	—
Dorchester	5	—	—	—	—	1	—	1	—	—	—	—	—	—	5	—	8	—	—
Wicomico	18	—	—	1	2	—	22	—	—	—	12	—	—	—	8	—	5	—	2
Worcester	9	—	—	—	—	1	2	—	—	—	—	—	—	—	2	—	—	—	2
Somerset	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—
Total Counties	223	0	56	27	228	3	191	2	0	0	272	0	0	15	56	1	38	—	26
Baltimore City	184	0	38	4	65	1	81	0	0	0	49	0	0	11	105	19	518	t-1	17
State																			
April 1-28, 1955	407	0	94	31	293	4	272	2*	0	0	321	0	0	26	161	20	556	—	43
Same period 1954	515	2	69	67	2949	2	478	0	0	0	289	3	0	36	169	8	655	—	43
5-year median	559	2	160	—	1000	8	334	2	1	206	2	2	37	171	21	493	—	64	

Cumulative totals

State																			
Year 1955 to date	1588	1	228	145	649	13	917	4	1	0	1802	0	0	138	637	55	2244	—	283
Same period 1954	2352	6	165	394	8097	20	1768	3	0	0	942	4	1	290	717	65	2311	—	251
5-year median	2128	13	349	—	3220	35	1164	7	1	822	7	9	215	831	96	2188	—	293	

m = mononucleosis.

t = trichinosis.

* = The onset of poliomyelitis occurred in these cases before the inoculations were given.



Blue Cross - Blue Shield



REPORT FOR THE BOARD OF TRUSTEES OF MARYLAND MEDICAL SERVICE, INC.*

HENRY F. ULLRICH, M.D., *President*

This is the Fifth Annual Meeting of Maryland Medical Service. On this occasion, we, as Trustees, have the opportunity to review the progress of the Blue Shield program in 1954, the fourth year for this non-profit, voluntary prepayment plan.

In 1954, membership under our standard program increased sharply, from 110,652 subscribers to 162,153 subscribers. This means that almost 52,000 more people in Maryland have Blue Shield, or 47 per cent more than at the end of 1953. Including membership under the Bethlehem Steel surgical program, this brings total membership to a new high of 260,457 subscribers.

There are some definite reasons for this excellent membership growth. First, our enrollment representatives have worked hard to encourage existing Blue Cross groups to add Blue Shield. Of the total standard membership, 127,140 subscribers are enrolled through groups. Second, at the year-end we had some 1600 subscribers under our new Non-Group Enrollment Program, a major development in 1954. And finally, 33,403 subscribers have group conversion memberships, paying their subscription charges direct.

Our local educational campaign, coupled with the excellent advertisements in national media, has of course contributed to this growth. We have had some very tangible results which can be attributed directly to this educational program, and I want to stress the fact that public information about Blue Shield is vitally necessary to the success of the program in the years ahead. People have got to know what we are before they can know how Blue Shield can help them.

Our total income in 1954 was \$2,120,969. Out of this Blue Shield paid 81.1% in benefits for subscribers, which incidentally is somewhat higher than

the 80.0% average reported by all the 77 Blue Shield Medical Care Plans for 1954. Our percentage is especially significant, when you remember that Maryland Blue Shield is still relatively new and still experiencing a high rate of new enrollments. After operating expenses, we put aside 7.8% in reserves, somewhat more than we did in 1953.

We provided benefits last year for 28,125 subscribers, 16,640 of whom had membership under our standard program. This represents an increase of about 5,200 paid cases over 1953. Under the standard program, 65% of the cases involved surgery, 24% were medical admissions, and the remaining 11% were obstetrical cases. Twenty-nine per cent also received benefits for anesthesia and for consultations.

Let me comment briefly on some of the major developments which occurred in 1954:

I have already alluded to the new Non-Group Membership Program, but I want to emphasize the fact that, were it not for this program, a significant cross-section of our Maryland population—the self-employed, the unemployed, and those working where there are less than five employees—would not have been eligible for membership. Needless to say, we are delighted to have it.

In 1954, we established a Physicians' Newsletter which goes out to all physicians in Maryland. Through this medium, we are now able to keep everyone up to date on important developments in Blue Shield. This newsletter, I might say, is a first step in the direction of a general program of physician relations, which will have appropriate emphasis as we continue to grow.

Late in 1954, the Board of Trustees of Maryland Medical Service passed a resolution to authorize payments for in-hospital medical care for the full number of days of hospital residence. This step eliminates a minor problem which has caused us some difficulty in the past year. And at the same time, the Board also authorized Blue Shield to provide the full scheduled benefits to subscribers who receive care from non-participating physicians, with the provision that such payments would henceforth be paid directly to the subscriber.

* Given at the Annual Meeting of Maryland Medical Service, Inc., February 23, 1955.

Finally, Mr. Dabney, our Director, tells me that we now have a Product Research Committee at work, studying ways and means to improve the coverage we provide for our subscribers, and I am told that this committee will soon submit its initial recommendations for certain changes in the Blue Shield benefits.

In closing, I want to say just a word about Blue Shield nationally. The 77 Blue Shield Plans, most of them partial service programs like Maryland Medical Service, enrolled their 30 millionth subscriber in 1954, and some 12,000 people are joining their local Blue Shield Plans every working day.

Last year, these Plans paid some \$300,000,000 in benefits for 6,500,000 separate physicians' services. And in the areas served by the Blue Shield Plans, there are 122,000 participating physicians, roughly 89% of all the physicians in private practice in these areas. This is certainly a gratifying record.

I want to thank the members of the Board, our participating physicians and our Blue Shield staff for their splendid cooperative effort in making 1954 a memorable year for Maryland Blue Shield. I have every confidence that we will accomplish even more in the future.

MORE INFORMATION ASKED ON NUCLEAR EXPLOSION TREATMENT

The AMA Washington Letter, No. 84-12

Because of "needless official secrecy" on the part of the Atomic Energy Commission, the country's physicians are not as well prepared as they could be to care for victims of a nuclear explosion, Congress has been told. Dr. George LeRoy of the University of Chicago made the charge in testimony before a Senate Government Operations Subcommittee. Dr. LeRoy said it was difficult to understand why AEC had imposed any secrecy at all on the effects of radiation, because "any kind of secrecy or any kind of concealment of information that would save lives is repugnant to the physician and the biological scientist." The atomic security subcommittee of the Senate-House Joint Atomic Energy Committee said it would schedule hearings to determine whether nuclear security regulations are hampering civil defense. In reply to Dr. LeRoy the Atomic Energy Commission declared it is releasing the disputed information as soon as the material is in such form as to be of value to the medical profession.

Book Reviews*

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them.

The Physician and His Practice. Edited by Joseph Garland, M.D., 1954. Little, Brown & Co., Boston, Toronto, Publishers. 270 pages. \$5.00.

Dr. Garland, who is Editor of the New England Journal of Medicine, has assembled a collection of 19 essays concerned with various aspects of a physician's life and practice. These essays were written by 18 authorities, each of whom concentrated on a particular phase in the life and practice of a physician. The scope of these essays is broad and the subjects range from the doctor's wife to the business aspects of practice and the problems of economic security. Many deal with the various forms of practice.

This book was planned as a source book of information regarding the physician's career and his positions in the family and the community. The influential roles of hospital associations, organizations, and community medical resources are elucidated. Business, economic and legal aspects of practice are discussed clearly and expertly. Many ground rules are laid down.

These collected essays are concise and practical. They accomplish the editor's purpose of providing reference material in an accurate, detailed fashion. Wherever possible they have emphasized the rules by which a physician should control various facets of his practice.

Although much of the material presented in this book is of practical value to an established physician, the majority is of inestimable value in the orientation of a young physician. It is unlikely that he will have learned such material in school and in hospital training. Usually he must learn it by experience.

Most physicians' wives would do well to read many of these essays. Too often the young belabored wife has difficulty in maintaining a broad, unbiased view of the overall problem which confronts her husband.

In conclusion, *The Physician and his Practice* contains a wealth of practical information organized and written by experts in many fields of medicine, law and business. Frequently this information provides answers to everyday problems, often it provides only criteria by which one may make plans for development.

W. C. E.

* Under the auspices of the Medical and Chirurgical Faculty and the Maryland Division of the American Cancer Society.

Public Relations in Medical Practice. James E. Bryan, The Williams & Wilkins Co., Publishers, 1955. 301 pages. \$5.00.

The public relations of the medical profession have been much emphasized in recent years. Why do they seem so much more important now than they did formerly? I believe it is because there is a feeling that the medical profession has had to take the defensive because of an organized propaganda campaign against the profession by certain agencies of our own government. The medical profession of America has through the years built up a system of medicine which has now gotten to be the best that the world has ever seen. Why then have these above mentioned agencies of our own government attacked us? It is not because doctors are worse than they used to be—on the contrary, they are on the whole very much better. There have always been good and bad doctors both professionally and morally. That is still true. Certainly the professional quality of the average doctor is many times better than it was fifty years ago. Someone has said that the worst doctor of today is better than the best one of fifty years ago. That, of course, is an exaggeration. However, everyone recognizes the great strides that we have made professionally. If we have not made as great strides morally, I believe it is because the political philosophy of the last twenty odd years has been one which has caused a general deterioration in the morals of all of our citizens. No one can live under a system which encourages people to "get by" with all they can without suffering a moral decadence, especially if one yields to the temptation to take advantage of the "grants" and "handouts" of the system. His moral fiber is apt to be strengthened however if he has the courage to openly fight such a system.

Why then have certain agencies of our government, and their followers outside of the government, attacked an old and honorable profession which has reached the highest point of its efficiency professionally? It is, of course, because they want to substitute a socialistic system of medicine for our system of free enterprise in medical practice. They have, therefore, put the doctors on the defensive and have caused us to be increasingly conscious of the necessity of improving our "public relations." That is why Mr. Bryan, who is Administrator of the Medical-Surgical Plan of New Jersey, has taken the trouble to write a 300 page book on "Public Relations in Medical Practice."

His book is very readable and well written, but of course it contains a lot of truisms. No book on such a subject could be written unless it did. The author, whose father was a doctor, and who has been identified with the medical profession during most of his life, also makes a good many statements with which the present reviewer cannot agree. On the other hand, there are many thought provoking points in the book. The author points out many things, formerly entirely foreign to our profession, which are probably necessary for us to do these days, when we live in a society that is full of conflicts and antagonisms which were not present at all fifty years ago, when life was much more simple, and when there was not an enemy lying in ambush at every turn.

Mr. Bryan speaks of the doctor as being an aloof person, and states that in his academic years he is withdrawn and cloistered from the non-medical world in which he is to work. That is unquestionably more true today than it used to be, because the competition for admission to good medical schools has become so keen that the premedical student is much more apt to spend his college years on purely scientific subjects, and to neglect the cultural subjects which have helped to make the well rounded medical man of the past. That is a great pity and our public relations would undoubtedly be helped if our present day doctors were not so narrowly educated.

In his chapter on "The Doctor and His Patient" the author stresses the fact that the doctor should be interested in his patient. That, of course, goes without saying. He also speaks of the "glittering impersonal arena of the hospital." This has been so much talked about that a great many people really get to believe it. Yet doctors and nurses and technicians and orderlies make hospitals. Some of these are very impersonal among the "glitter" and some are quite the contrary. Many a patient who has had a dread of entering a large hospital, has come out with a very friendly feeling towards that hospital because he was treated as a person while there, not just as a patient, and felt that everyone took a personal interest in him. We should all see to it that all of our patients feel that way on leaving our hospitals.

One way in which a doctor could improve his personal relations with his patients is by keeping his appointments on time. Too many doctors keep patients waiting for hours before they are seen. This is true of some of the outstanding men in our profession who have the busiest practices and who are most popular with their patients. The patients put up with the long waiting periods because they value their doctor so highly and are so fond of him. The doctor is generally quite unaware that the patients, just the same, are annoyed by being kept waiting. It should be remembered that the patient's time is often

just as valuable as the doctor's. The courtesy of appointments promptly kept is greatly appreciated by the patient and raises the doctor in stature. I know of one busy business man who went into the office of a busy doctor, was kept waiting outrageously, and left, telling the doctor's secretary that he would come back when the doctor was ready to keep a fixed appointment. When he did go back, the doctor saw him promptly.

In the chapter on "The Doctor and His Fee" the author points out that the American Medical Association has recently urged every physician to display a plaque in his office, which says to the patient: "I invite you to discuss frankly with me any question regarding my services or my fees." Such a procedure seems to me undignified in the extreme. It assumes that there is something wrong with doctors' fees. Of course it is true that some doctors do charge unreasonable fees. Such instances, however, I believe are rarer in the medical profession than in other walks of life. Of course, a doctor should discuss his fees with his patients whenever they show any inclination that that is their desire. But to be ostentatious about a willingness to discuss fees is to intimate that there is something wrong with them. The doctor has services to sell, so naturally he charges fees, although it is obvious that his services cannot be compared with commodities sold across the counter. If his fees are right, there is no point in being on the defensive with regard to them. This has recently gotten to be the case entirely too often because of the trend in the times.

In discussing the relationships of the doctor with his community, the author says that the doctor ought to go to church. Certainly the doctor ought to go to church if he feels that it is his duty to do so, or if churchgoing elevates him spiritually. However, if he goes to church only to help him in his practice (as this reviewer was advised to do when he first began his practice), he is a hypocrite and not worthy of his profession. An eminent official of the American Medical Association recently made the statement that he did not believe a man could be a good doctor unless he believed in certain principles of religious dogma. How can he or any other man tell what motivates the breast of his colleague? Christ said "by their fruits ye shall know them." I had much rather judge a doctor by the kind of relationship he has with his patients than by how often he goes to church. Many doctors have a little private religion of their own, which they don't talk about, and that coupled with their own high sense of moral duty is often more effective as a guide of life than the dogma-adhering beliefs of some of their colleagues.

The author also states that the "medical profession should have an affirmative policy towards such matters as slum clearance and public housing, more adequate

support for public education, prison reform and the control of juvenile delinquency." Here again this reviewer finds himself in complete disagreement with the author. Individual doctors, of course, have a right to support or oppose any public measure. So has the medical profession as a whole, and the American Medical Association has come out strongly opposing socialized medicine. Another national organization, the Association of American Physicians and Surgeons, has come out strongly opposing socialism in any form. Most of us feel that such things as public housing are forms of socialism.

The author criticized the profession for its energetic disapproval of certain measures. If a measure is evil, why shouldn't it be energetically disapproved? There are some who say that if we oppose socialized medicine, we should offer a substitute for it. I have said this before and shall say it again: Suppose the government advocates rape: Am I to be criticized for opposing it, because I do not offer as a substitute either mayhem or housebreaking? Remember that those who oppose evil oppose it because they are interested in the good, and while they are opposing evil they are also working for the good. The astounding accomplishments of our profession are an adequate answer to those who feel that our attitude is purely negativistic. To say that the medical profession is negativistic is poppycock. We should not take the defensive with regard to this accusation, but assume a vigorous offensive in order to show the public what our accomplishments have been and how false are the charges which have been made against us. The Committee on Public Medical Education of the Baltimore City Medical Society has been actively engaged in such an offensive for a period of years.

The author's observations on the doctor's duty to his medical society are pertinent and well founded. He speaks of the "members of that amorphous majority of physicians who take no part in society affairs and seldom if ever attend meetings" but who constantly criticize "the clique that runs things." Time and time again members are put on committees in order to try to arouse their interest, and never even attend a committee meeting. Naturally such men are of no value in the administration of the society. Any doctor who wants to become active in his society may show his interest at least by attending meetings, entering into discussions, helping out on the emergency medical service, making talks, writing articles, etc. There is little chance of the man who shows his interest and ability being allowed to sit idly by and have somebody else do his work for him. There are always too few people who are willing to work and that is the reason in any organization for the small group who shoulder the responsibilities of the administration.

The author suggests that medical men get better acquainted with labor leaders by having conferences, dinners, etc. A great many of us have tried that, and unquestionably it does help, but it should be pointed out that the labor leaders will not allow speakers to speak to their unions unless the speakers are in accord with the union policy. For instance, when labor leaders were so strongly advocating national compulsory health insurance, they would not allow members of speakers bureaus to talk to their unions, to show them the dangers inherent in the proposal and how such plans had worked to the detriment of good medical care in other countries.

In speaking of health and accident insurance, the author states that the doctor all too frequently is inclined to look upon an insurance company payment as a platform upon which he may superimpose his regular fee. This, of course, is wrong. The doctor should charge his regular fee and let the patient's insurance take care of whatever part of that fee it will cover. While there are occasional abuses among the medical profession with regard to insurance plans, it should be pointed out that abuses among patients are far more common. We would not be guilty of trying to remove a mote from our neighbor's eye while there was a beam in our own, but on the contrary we should not be accused of having a mote in our eye when there is often a beam in the eye of the accuser. Instances are common in which patients refuse to sign permits allowing the insurance companies to pay the doctors' fees directly. They then collect the fees themselves, and do not pay the doctor. I know of one instance in which a surgeon charged a modest fee for an extensive major operation. The patient carried enough insurance to pay the doctor \$50 more than his fee, and the doctor was paid directly. The patient asked the surgeon to refund to him the \$50, although his policy specifically stated that this amount was for the surgeon's fee for that particular operation.

The author correctly points out that in today's market automobiles cost two or three times as much as they cost ten years ago and yet the public buys them eagerly. The average person spends more for cigarettes, radios, and television, than for insurance against the cost of illness. The strides however towards more people being insured, and more people being better insured, have been great in the last fifteen years. Naturally there will always be some people who cannot or will not buy insurance. It is because of them that the social planners are constantly trying to urge socialized medicine upon us. When such people are in need they should be handled at the local, and not the national, level.

In summing up the doctor as a man, the author says that older physicians deplore what they consider a lack of moral and ethical standards among young men coming

into practice. They feel that there is too little feeling for the old and better traditions of the profession and too much a tendency to try to work shorter hours for more material gain. Isn't that just what one might expect from the political philosophy that has been foisted upon us by the last several national administrations? Franklin D. Roosevelt continuously harped upon the common man and sought unusual advantages for him. (Some people "unkindly" accused him of doing this for political reasons.) I agree with Lady Astor that the uncommon man is the man that deserves consideration, because he is the man who always does things in the world, and not the common man. (The uncommon man of course may come from any stratum of society.) The doctor has to be an uncommon man if he is going to be a good doctor. Unquestionably some of the younger men coming along are in that class, just as they have always been, and that in spite of the demoralizing influence of the past couple of decades.

The author speaks of the long hours which doctors work—50 per cent longer than the "accepted norm of 40 hours." I object to the term "accepted norm." That is a norm that has been foisted on us by political planners who try to discourage work, rather than stimulate it. Our country did not become great by men working short hours or having a poor sense of moral values. It became great by thousands of citizens, in all walks of life everywhere, burning the midnight oil and working hours "above and beyond the call of duty," in order to gain objectives which helped, not only them, but their fellow citizens as well. Our author also devotes a good deal of space to the need for a doctor having a hobby, taking longer vacations, etc. He also deplores the fact that a great many doctors have their "day off" crowded with engagements which take them away from their families as effectively as does their practice. It must be remembered that men differ, and that men in the medical profession differ just as other men do. Some doctors never take a "day off" and get along very well without it. Each doctor must be allowed to paddle his own canoe and make his own plans for his working hours and his vacations. It is doubtful if a layman can thoroughly understand a doctor's attitude towards his work. There are, of course, variations in that attitude, but on the whole the standard is pretty high. It is true that the mortality rate for coronary artery disease among physicians is 181 per cent of that of white males generally. However, there are compensations, even if the doctor does not live quite so long as the average male. And, after all, isn't it much better to die of coronary artery disease than of some lingering, debilitating, crippling, emasculating illness?

To sum up, it seems to me that the essence of good public relations in medicine is for the physician to be a

good citizen, to be a good doctor, to treat his patients right, to be their friend as well as their doctor, to temper justifiable pride with the proper amount of humility, to love the right and hate the wrong, to keep his chin up, to do his level best—and let the chips fall where they may.

A. R. K.

Therapeutic Abortion: Medical, Psychiatric, Legal, Anthropological and Religious Considerations. Edited by Harold Rosen, Ph.D., M.D. Cloth. 348 pages. Julian Press, Inc., New York, 1954. \$7.50.

Thirty authors contribute to this volume which purports to survey the psychiatric, medical, legal, anthropologic and religious aspects of therapeutic abortion.

The author of the legal foreword, Dr. Hubert Winston Smith, states that this anthology is a substantial contribution to the multi-dimensional study of human behavior; and that he will make active use of it in the training of law students.

Dr. Ewen D. Cameron, author of the psychiatric foreword, points out that while no final agreement emerges from the work, it is possible to see the changing nature of the abortion problem in Western society, and to speculate upon the eventual solutions.

In his obstetrical foreword, Dr. Nicholson J. Eastman shows that the decreasing incidence of therapeutic abortion because of organic disease is based on extensive clinical experience which has proved that properly managed pregnancy seldom aggravates organic disease.

The book is predominantly given over to the psychiatric considerations of the problem, together with a study of the emotional aspects of sterility, infertility, male and female sterilization and hysterectomy.

As concerns the psychiatric aspects of the problem, this reviewer is not qualified to express an opinion. However, it is heartening to an obstetrician to gain the impression from the authors of these chapters that therapeutic abortion for psychiatric reasons is not the panacea that it originally was considered to be, and moreover, that the emotional trauma as a consequence of abortion is at times more serious than the condition for which the abortion was performed. It is also rather comforting to note that there is often disagreement among the psychiatrists.

The editor, in his chapter on the hysterectomized patient (which is based on a study of 24 such patients) is inclined to believe that a personality evaluation would be well worth while whenever a hysterectomy is contemplated. The editor further recommends that all obstetricians and gynecologists, and all surgeons as well, should have some psychiatric training during their residency period, going so far as to state that a year of

psychiatric training should be required for specialty board credit.

There is psychiatric disagreement with obstetricians who insist that those patients whose pregnancies are to be interrupted therapeutically on psychiatric indications must be concurrently sterilized.

Roman Catholic, Jewish and Protestant viewpoints are presented.

The final chapter is a bitter denunciation of the

present program of hospital board control of therapeutic abortion which is said to be often arbitrary, discriminatory and scientifically unsound.

There is an author-biography section, a bibliography, a glossary and a name and subject index.

The obstetrician, gynecologist and the psychiatrist will benefit by reading this interesting anthology, but probably its best use will be as a reference work.

J. E. S.

Reminder!

ANNUAL MEETING

AMERICAN MEDICAL ASSOCIATION

Atlantic City, New Jersey

June 6-10, 1955



Woman's Auxiliary Medical and Chirurgical Faculty



MRS. JOHN G. BALL, *Auxiliary Editor*

PRESIDENT'S ACCEPTANCE SPEECH

MRS. GERALD W. LEVAN

April 21, 1955

Today, as provided by our Constitution, the Woman's Auxiliary to the Medical and Chirurgical Faculty has elected general officers for the fiscal year 1955-56. These officers, with the president-elect who has now succeeded to the office of president, will serve for this period as the Executive Board. This Board is charged with carrying out the

mandates and policies of the Auxiliary. By acceptance of office and installation, we have pledged to you our loyalty and earnest endeavors toward that end. We assume this responsibility humbly and without false pride, for each member of our group is a potential officer and each member feels equally the desire to serve in the cause of health and medical welfare.

Being an auxiliary to the greatest public service organization in our state is our heritage. And we are very proud that we are privileged to be members of an auxiliary to one of the oldest medical societies in the nation, the seventh in line of organization! It is from this group that we obtained our birthright and to which body we look for guidance and help in our service to them in promoting the objectives of the medical profession on all levels.

Our first objective is to assist our Medical Society in the advancement of medicine and public health. We are ready and willing to conform to the wishes and suggestions of our state and county medical societies and if the relationship between the medical society and the auxiliary is one of mutual support and confidence, then our program, especially public relations, will function more smoothly and effectively.

Basically, our Auxiliary program does not change from year to year but there is need to intensify our efforts and inject more enthusiasm in order to increase the effectiveness of projects already under development while we adopt new projects as the need arises.

Since the theme of our National organization this year is "Leadership in Community Health," we in the states and counties are urged to put more effort in self-education within our Auxiliary and for health education and health service in our respective communities. In order to assume the responsibility of community health leadership we must be informed on the problems facing the medical profession and how we can help to solve them. As in all auxiliary



MRS. GERALD W. LEVAN

Boonsboro, Washington County, Maryland

President, Woman's Auxiliary to the Medical and Chirurgical Faculty of the State of Maryland, 1955-56

work, our first rule of procedure is consultation with the Advisory Committee of the Medical Society so we can be sure our plans have the approval of our doctors.

Almost every phase of auxiliary work comes under the heading of either program or public relations. Program is the *learning*, or self-education, and public relations is the *doing*, or each member in action. If we are well informed on the functions, policies and aims of the medical profession on national, state and local levels then we will be able to help the layman to understand what we are doing in his interest. We *are* public relations in what we do and say, every day, and it is our activity and attitude that the layman determines the profession's attitude toward the community.

To review the work of our various committees would be superfluous and require too much time now, but I do wish to mention one project common to most auxiliaries—Nurse Recruitment. We are privileged to have a part in the recruitment of young women to the nursing profession, which so closely touches medicine. Recruiting and training of professional and practical nurses through our scholarship and loan funds has been our one all-out project and will continue to be as long as the shortage of nurses remains an acute problem. Our organization and support of fifty-odd Future Nurses Clubs in the high schools of the state has been the means of interesting many teenagers in nursing careers.

One of our aims for this year will be further expansion of membership and organization of more county auxiliaries. Our State Medical Society has a membership of about 2,500 but our auxiliary members are woefully lacking when the potential numbers 2,000 and we can claim less than one-fourth of those who are eligible to become members. In order for us to take our rightful place by our State Medical Society, we must more nearly approach it in membership. A matching membership would establish the idea of complete unity and be an effective means of placing the Auxiliary in a definite role of leadership in community health.

A constant flow of new life not only stimulates an organization, but adds to the stature and prestige and is the means of finding the leaders of tomorrow. We need the helping hands of new members to give impetus to our program and provide the necessary finances for its promotion. To be eligible for mem-

bership is a privilege extended to us by our husbands who are members in good standing in the State Medical Society. Frequently we do not appreciate a privilege—others would enjoy what we regard as unimportant.

Maryland has seventeen county medical societies not having an auxiliary. In six of these counties, the medical society has either given us its approval to organize or has notified us that their medical group is interested in having an auxiliary. We regret very much, indeed, that we have not been successful in finding enough interest among the wives of physicians in these counties for us to go ahead with organizational plans. We cannot be satisfied as long as there are so many eligibles who are still non-members of our State Auxiliary and we will not give up hopes of having them eventually. If organization in your county seems impossible at this time, then join us as a member-at-large and realize your power as an individual! You are a key woman in all that your community does and the nucleus for future auxiliaries. We WANT you and NEED you, and we hope you need us! There are many activities and benefits so our members may avail themselves of those that appeal to them. If you have a special talent or liking for some particular phase of Auxiliary work, please let us know about it.

Better understanding and good fellowship among doctors' families is one of our objectives, so let's work at it and make everybody feel welcome when they are in our midst! Let each one of us resolve to make a point of finding a new friend at each meeting. We don't need a secret formula to make friends. The plan is so practical and workable; yet, how often we fail to apply it! Friendliness will help more than anything else to increase our attendance, and bring unity and harmony which are essential in our work and social activities. Through acquaintanceship grows understanding, goodfellowship and cooperation in all our undertakings. Let us each make an effort to KNOW THE OTHER MEMBER BETTER—it may lead to wonderful and lasting friendships.

We, the new officers whom you have elected today, are deeply conscious of our responsibilities to maintain the high standards set by our predecessors and will give you the best we have. In return, we ask the full wholehearted cooperation of the entire membership in our endeavor to serve the medical pro-

fession and the community in which we live. We offer our aid to the Medical Society when there is a situation or responsibility with which we can assist. Medical societies may be overlooking their most potent ally if they do not utilize their auxiliary fully. Your interest is our greatest incentive!

As President, I look forward to a year of growth in both membership and achievement and earnestly seek your counsel and advice toward that end. Our

accomplishments depend upon the willingness of each individual member to do her part and I have perfect confidence in the loyalty and cooperation of the membership. It will be a pleasure and my endeavor to work hand in hand with the members, officers and the Medical and Chirurgical Faculty to make this year a successful one. I shall strive to merit your confidence and the honor of serving as your President.

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ANNUAL CONVENTION

The thirty-second annual convention of the Woman's Auxiliary to the American Medical Association will be held in Atlantic City, New Jersey, June 6 to 10, 1955.

Registration will open on Sunday noon, June 5. A tea honoring the president and president-elect will be given on Monday, June 6. All doctor's wives are cordially invited.

Plan to attend this meeting!

WOMAN'S AUXILIARY TO THE MEDICAL AND CHIRURGICAL FACULTY SEMIANNUAL MEETING

*

Friday, September 16, 1955

Commander Hotel, Ocean City, Maryland



MARCH 30 PROCLAIMED DOCTOR'S DAY IN BALTIMORE*

On Wednesday, March 2, Mayor D'Alesandro signed a formal proclamation of Doctor's Day which he presented to Dr. Amos R. Koontz, President of the Baltimore City Medical Society. The proclamation was issued by the request of the Woman's Auxiliary represented by their President, Mrs. E. Roderick Shipley, who was present for the ceremony.

* Submitted by Mrs. E. Roderick Shipley.

Dr. Koontz displayed the document to those assembled for the regular meeting of the Baltimore City Medical Society on Friday, March 4, and expressed the appreciation of the doctors for the tribute thus paid to them and their knowledge that the interests of the physician are uppermost in the minds of their Auxiliary.

Coming Meetings

THE COMMITTEE FOR THE STUDY OF PELVIC CANCER

RICHARD W. TELINDE, M.D., *Chairman*

BEVERLEY C. COMPTON, M.D., *Secretary*

Thursday, June 16, 1955, 5:00 to 6:00 p.m.

Faculty Building, 1211 Cathedral Street, Baltimore

Sponsored by the Maryland Division of the American Cancer Society and the Medical and Chirurgical Faculty.

PLAN THIS AS PART OF YOUR VACATION

Semiannual Meeting—Ocean City, Maryland

MEDICAL AND CHIRUGICAL FACULTY OF MARYLAND

Friday, September 16, 1955

Headquarters—Commander Hotel

Plan to attend and make your Hotel Reservations now.

EXCERPTS FROM THE NATIONAL FAMILY SURVEY OF MEDICAL COSTS AND VOLUNTARY HEALTH INSURANCE

Odin W. Anderson, Ph.D.*

1. The total annual charges for personal health services incurred by families in the United States is \$10.2 billion.
2. Of these \$10.2 billion, physicians charge \$3.8 billion (37 per cent), hospitals \$2.0 billion (20 per cent), prescriptions and medicines \$1.5 billion (15 per cent), other medical goods and services \$1.3 billion (13 per cent), and dentists \$1.6 billion (16 per cent).
3. Of all charges incurred by families 15 per cent is covered by insurance benefits. Broken down by type of service: hospital services, 50 per cent; all physicians' services, 13 per cent; surgery, 38 per cent; obstetrics, 25 per cent. The proportion paid by insurance for other benefits was non-existent or negligible because they are usually not covered.
4. The average charges for all personal health services is approximately \$207 per family; one-half of the families have more than \$110.
5. The families with insurance incurred a total median cost over twice as great as those without insurance, \$145 compared with \$63.
6. Seven per cent of the families, or approximately 3,500,000 families, incurred charges in excess of \$495.
7. One-half of the families paid out 4.1 per cent or more of their incomes.
8. Approximately one million families paid out amounts equalling or exceeding one-half of their annual incomes, of which approximately 500,000 families paid out amounts equalling or exceeding 100 per cent of their incomes.
9. Among families receiving hospital insurance benefits, 50 per cent had 89 per cent or more of their gross hospital charges covered by hospital insurance.
10. Among families receiving surgical insurance benefits, 50 per cent had 75 per cent or more of their gross surgical charges covered by surgical insurance.

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EXCERPTS FROM THE NATIONAL FAMILY SURVEY OF MEDICAL COSTS AND VOLUNTARY HEALTH INSURANCE

Odin W. Anderson, Ph.D.*

In July 1953 there were over 87 million people, or 57 per cent of the population of the United States, enrolled in voluntary health insurance and protected against part of the costs of hospital services, and over 74 million people, or 48 per cent of the population protected against part of the cost of surgical and other physicians' services. These figures were derived from house to house interviews of a representative national sample of 2,809 families, comprising 8,846 individuals, subdivided by age, sex, income, family size, rural-urban, occupation and region. Thus it has been possible for the first time to project, with a high degree of validity, the extent of enrollment in voluntary health insurance in the United States.

Total enrollments of over 87 million in hospital insurance and over 74 million in surgical and other medical services did not take place suddenly, to be sure, but expansion since 1940 has been phenomenal. In 1940, approximately 9 per cent of the population was enrolled in hospital insurance as against 57 per cent today. Four per cent of the population was covered by surgical insurance compared with 48 per cent today.

* Courtesy of the Health Information Foundation, 420 Lexington Avenue, New York 17, New York. Published January 1954.

REPORTS

The AMA Washington Letter, No. 91

As of September 1, Veterans Administration had only two service-connected cases awaiting hospitalization. At the same time 19,878 non-service cases had qualified for treatment and were awaiting hospitalization. For August, the average VA daily patient load was 109,450, compared with 105,486 in August of 1953 . . . Hill-Burton projects currently total 2,308, at a total cost of \$1.8 billion, with a federal share of \$625 million. Included are 110,735 hospital beds and 487 health centers. (The new Hill-Burton program, to stimulate construction of other than complete hospitals, is just getting started this year.) . . . A bimonthly report of U. S. Operations Missions (conducted by Foreign Operations Administration) shows health training programs under way in 19 countries of the Near East, South Asia, Africa and the Far East.

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EXCERPTS FROM THE NATIONAL FAMILY SURVEY OF MEDICAL COSTS AND VOLUNTARY HEALTH INSURANCE

Odin W. Anderson, Ph.D.*

After considering over-all national estimates, it is well to come down to the family unit and its experiences with costs of personal health services. Exclusive of insurance premiums and the portions paid by insurance, the average charges incurred by families is \$178 per year. The gross charges including the amounts paid for insurance are \$207 per family per year. Families with insurance incurred an average gross charge of \$237 and families without insurance an average of \$156. The gross hospital charges are approximately \$42 per family per year, and physicians' charges would be around \$75. Medicines average \$31 per year; other medical services and goods, \$26; and dentists, \$33.

The foregoing discussion was concerned with average family charges, but hereafter the median charges will be used. The median gross charges for all services is \$110 per year, which means that one-half of the families experienced charges of less than \$110 and one-half more than that amount. Since the average gross charges exceeded \$200, this indicates that there were some extremely high costs experienced by some families which pulled the average up. The median disregards the extremes and is a more meaningful statistical device in some circumstances. Families with insurance incurred greater charges for personal health services than those without insurance; a median of \$145 compared with \$63 or an average of \$237 compared with \$156. This is in part due to greater utilization by those with insurance and possibly also utilization of a more expensive type of service, for example, a private room in a hospital instead of semi-private or ward. Obviously, the higher costs incurred by the insured group have great implications for the national costs of personal health services as voluntary health insurance continues to expand.

For all families there are great differences between incurred charges by income groups, ranging from \$54 for those under \$2,000 to \$238 for those over \$7,500. Since the dollar-value of free care is undetermined, it is possible that the costs of services received by families under \$2,000 would be higher than the gross incurred charges of \$54. For example, 27 per cent of families had at least one family member hospitalized, but only 26 per cent reported gross hospital charges. Similarly, 77 per cent of families reported attendance by a physician, but only 75 per cent reported gross physicians' charges.

* Courtesy of the Health Information Foundation, 420 Lexington Avenue, New York 17, New York. Published January 1954.